

Context Area 3 South Change Application

Traffic & Transport Assessment

PEET Limited

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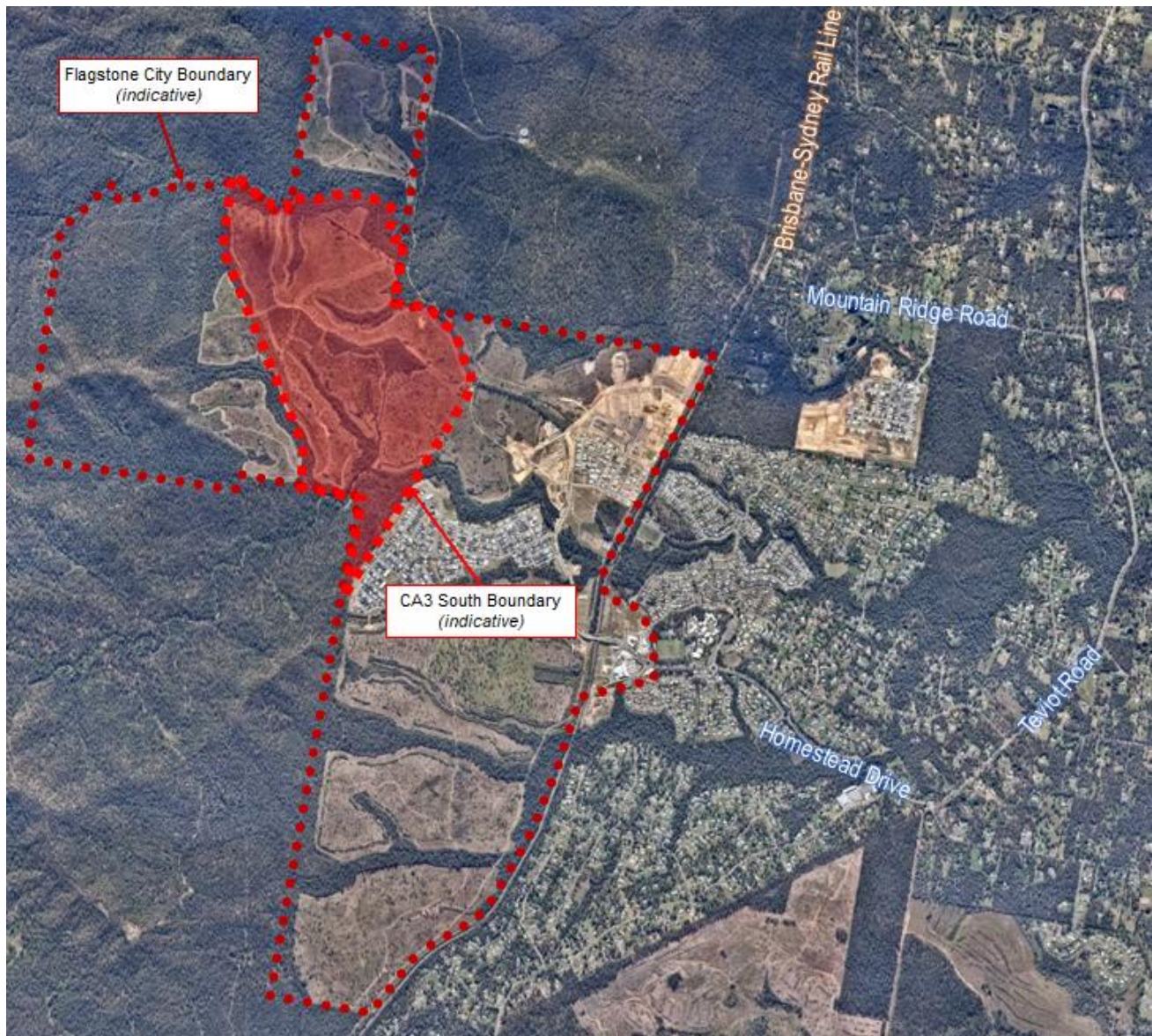
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1. INTRODUCTION

1.1 Background

Bitzios Consulting has been engaged by PEET Flagstone City Pty Ltd (PEET) to undertake a traffic assessment for the proposed change application to the approved Context Area 3 South (CA3 South) area within Flagstone City. The location of the CA3 South subject site with respect to the Flagstone City boundary is illustrated in Figure 1.1.



Source: Nearmap (edited by Bitzios)

Figure 1.1: Site Location

This report documents the proposed transport network and its integration with the surrounding network and future planning in the region. It includes an assessment of key intersections and identifies the necessary alternative transport provisions to suitably service the development, aligning with existing Context Area Plans and the endorsed Movement Network Infrastructure Master Plan (Movement IMP).

1.2 Scope of Assessment

The purpose of this assessment is to provide an overview and analysis of traffic and transport related elements of the subject site with the following scope of assessment:

- A review of the development's context with relation to transport planning within Flagstone City, the Greater Flagstone PDA and overarching transport planning in the South Logan area
- A review of the proposed development against relevant planning to date
- Detailing previous strategic modelling and current microsimulation modelling undertaken used to identify and evaluate appropriate road layout and road cross-sections within the subject site
- Source traffic volumes from the microsimulation modelling to assess key road links and intersections within the subject site
- Review alternate transport provisions throughout the site, including consideration of public and active transport facilities and connections.

1.3 Reference Material

The following planning documents have been considered as a part of this assessment including (but not limited to):

- The Flagstone City Movement Infrastructure Master Plan (IMP) (2024)
- The Greater Flagstone PDA Development Scheme
- The Development Charges and Offset Plan (DCOP) and mapping
- The approved Context Area Plans
- Relevant Economic Development Queensland (EDQ) Guidelines and Practice Notes.

2. SITE LOCATION & PLANNING CONTEXT

2.1 Context Plan Area

Flagstone City consists of five (5) overarching Context Plan areas. The subject site forms a large portion of the developable land within CA3, with the CA3 Plan endorsed 31 May 2023. The location of the subject site with respect to the endorsed CA3 plan is illustrated in Figure 2.1.

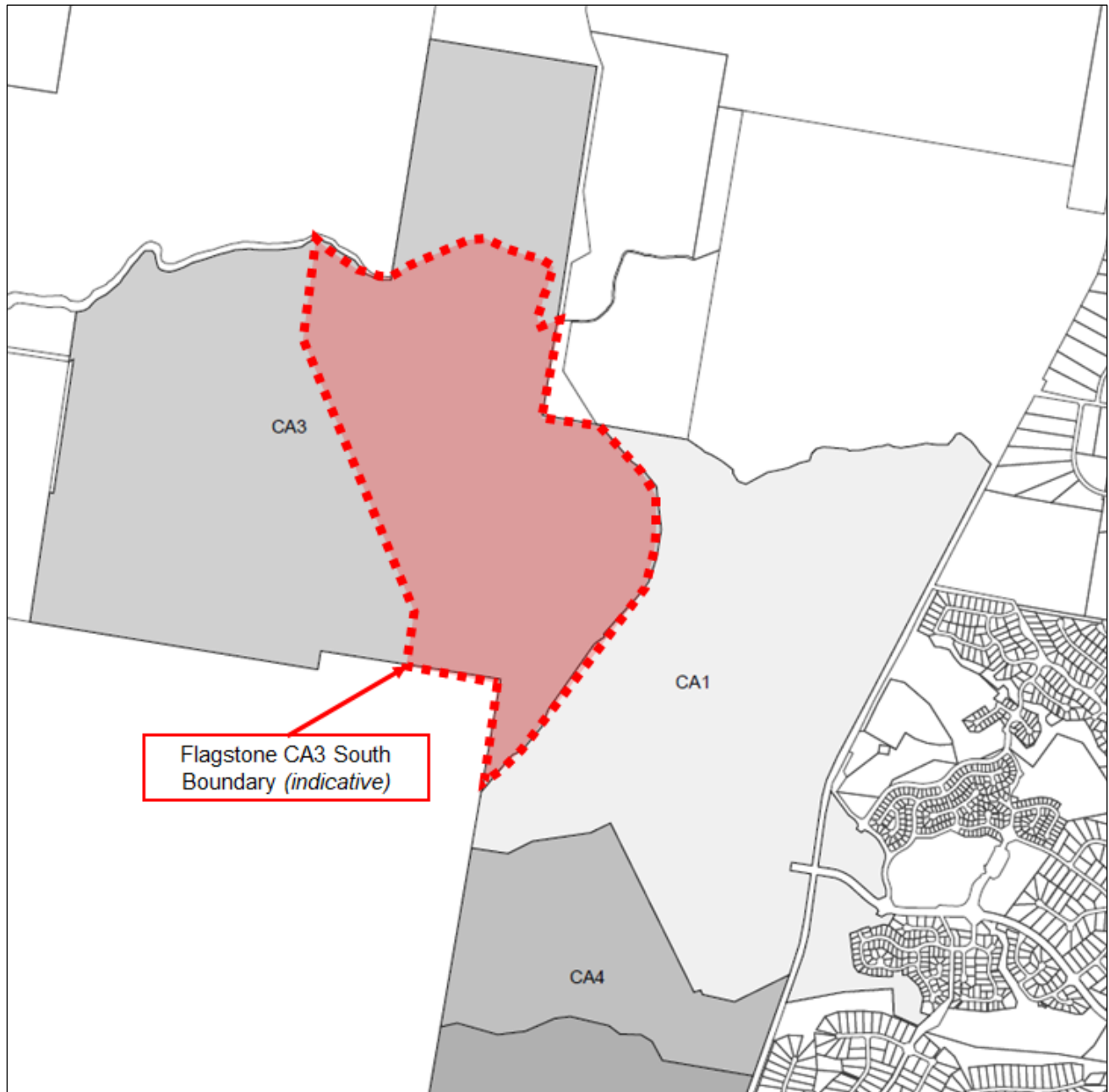


Figure 2.1: Subject Site and Surrounding Context Areas

2.2 Greater Flagstone Priority Development Area (PDA)

2.2.1 Overview

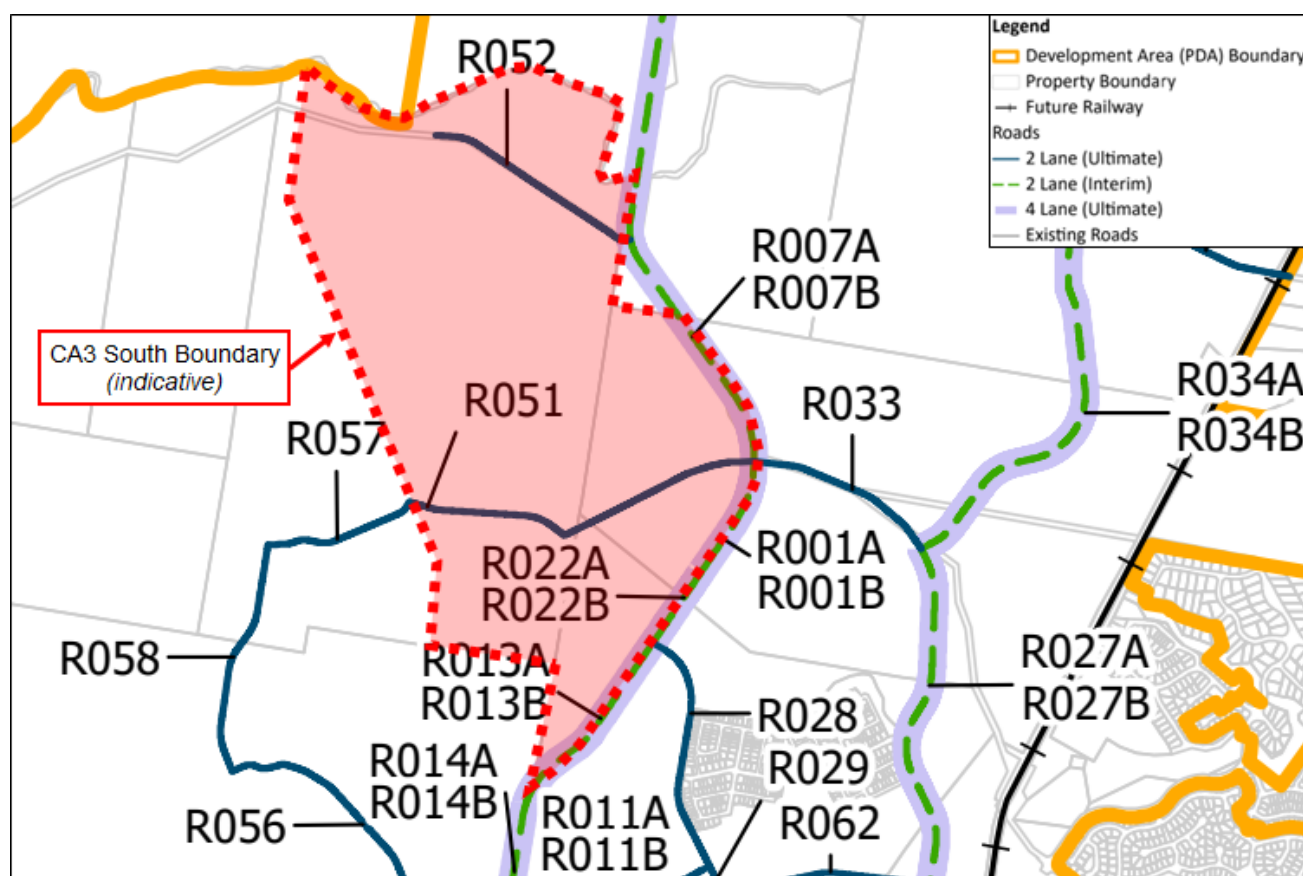
The Greater Flagstone PDA was declared on the 8th October 2010 and is located west of Jimboomba within the southern part of Council's LGA. Key PDA information is as follows:

- The PDA is made up of three (3) separate land areas totalling 7,188ha
- It is projected to experience significant growth in employment and industry
- It is estimated to accommodate approximately 51,500 dwellings & 138,000 residents.

The larger PDA land area is bordered by the Brisbane-Sydney rail line (which is predominately a freight line at present) located east of the subject site, while the Mount Lindesay Highway is located further to the east. The proposed Town Centre Masterplan forms a key portion of the PDA employment area.

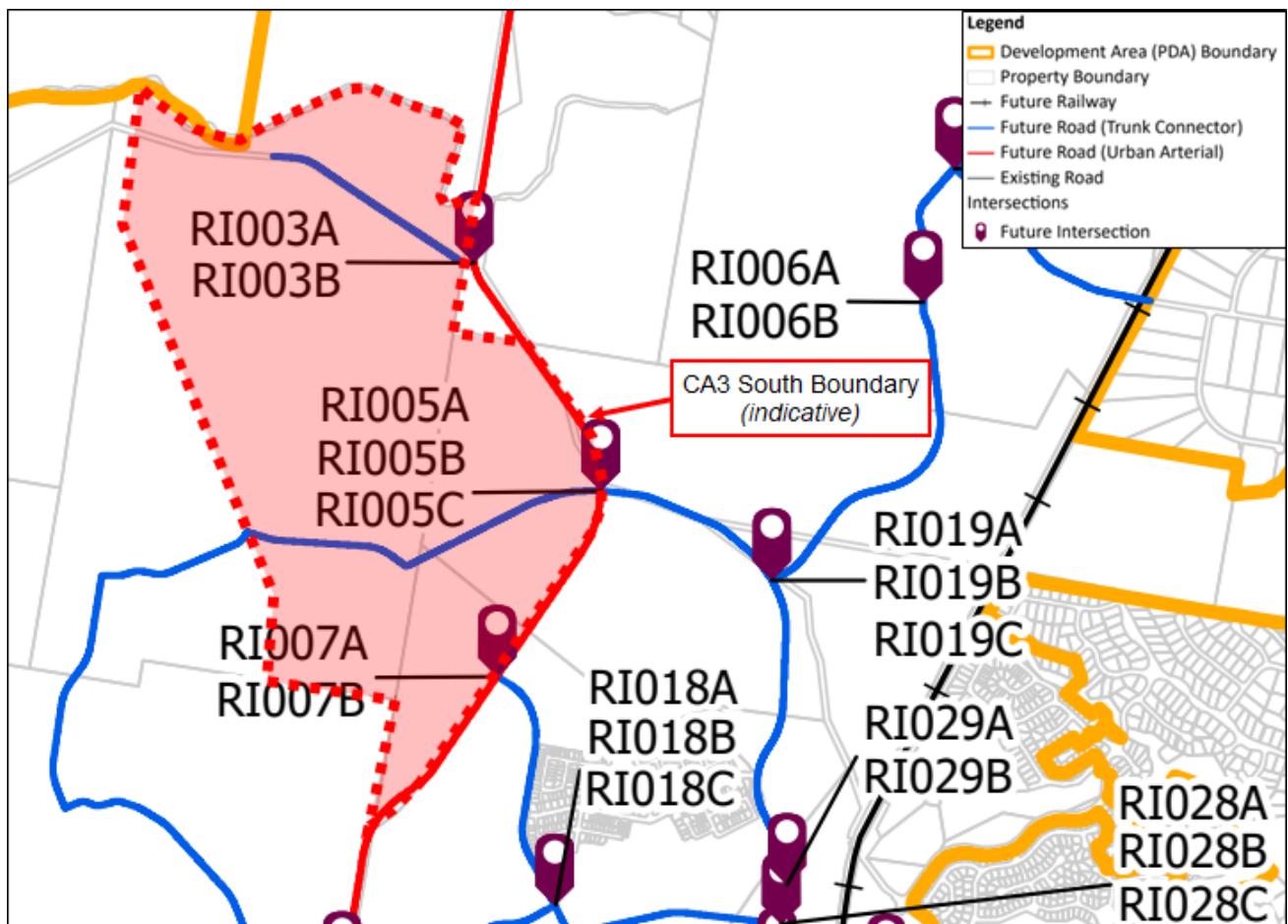
2.2.2 Greater Flagstone Development Charges and Offset Plan (DCOP)

To ensure infrastructure delivery and funding is suitably allocated, EDQ developed the Greater Flagstone PDA Development Charges and Offset Plan (DCOP) effective July 2022. This document provides guidance to trunk infrastructure planning through the PDA. Planned trunk transport infrastructure in the vicinity of the subject site is illustrated in Figure 2.2 and Figure 2.3 for the trunk roads (Map 3) and trunk intersections (Map 4).



Source: EDQ DCOP Map 3 (edited by Bitzios)

Figure 2.2: DCOP Transport (Roads) Trunk Infrastructure



Source: EDQ DCOP Map 4 (edited by Bitzios)

Figure 2.3: DCOP Transport (Intersections) Trunk Infrastructure

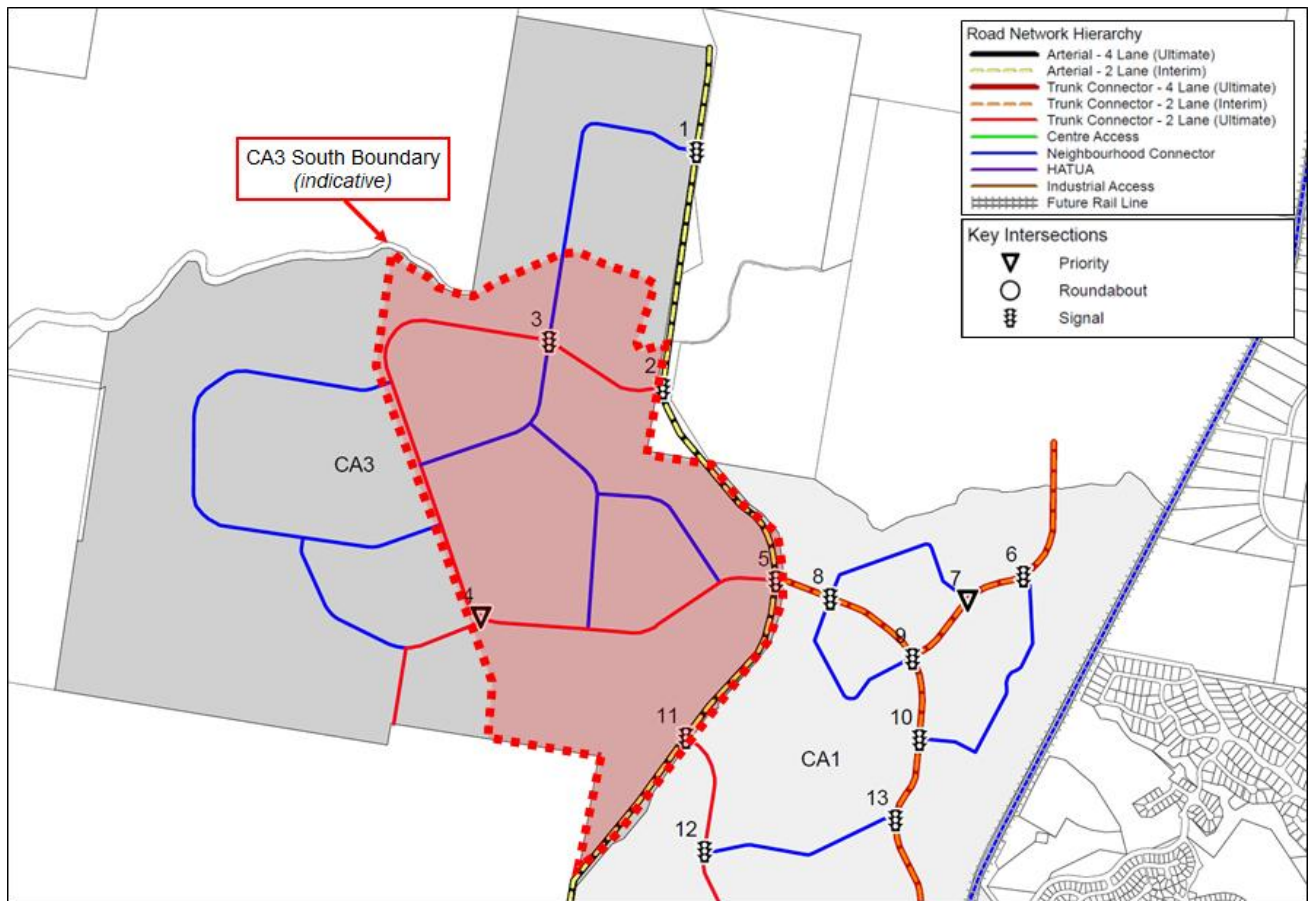
2.2.3 Movement Infrastructure Master Plan (IMP)

The Flagstone City endorsed Movement IMP (circa. 2024) was considered when developing the transport infrastructure requirements of the subject site

For context, the endorsed Movement IMP identifies:

- The ultimate four-lane configuration of New Beith Road adjacent CA3
- A two-lane trunk connector encircling the majority of the CA3 South area
- Key signalised intersections at the CA3 connections to New Beith Road.

The road network from the endorsed Movement IMP, relative to the CA3 South site area is illustrated in Figure 2.4.



Source: Flagstone City Movement Network Infrastructure Master Plan (2024) (edited by Bitzios)

Figure 2.4: Endorsed Movement IMP

As shown above (and in **Attachment A**), the proposed CA3 South road network generally aligns with the endorsed Movement IMP road network.

2.2.4 Existing Approval

An existing CA3 South approval is in place for the development of 1,642 allotments (maximum 1,668 potential residential dwellings). The approval for this application (DEV2024/1491) was granted on the 7th of May 2025. The endorsed plan of subdivision is shown at Figure 2.5.



Figure 2.5: Stamped Approved CA3 S Plan of Subdivision

3. DEVELOPMENT DETAILS

3.1 Proposed Development

Changes are proposed that will impact Stage 13 and portions of Stage 9. An outline of key changes includes:

- Replacement of large lot, slope affected lots within Stage 13 with typical size low density residential allotments
- Revised local road network through Stage 13 to service additional lots and provide additional connectivity between the local centre in CA3 S and Stage 9 / Stage 13
- Updated Stage 9N and 9M lot layout and road layout to minimise unnecessary laneways.

Updated CA3 South plans prepared by RPS are provided at **Appendix A** and include the relevant lot / dwelling estimates. Proposed land uses and key road connections within the CA3 South approval are not substantially different from the existing approval. Regardless, the following assessment will consider potential impacts associated with the minor increase in Stage 9 and Stage 13 residential yields as well as assessment of the revised internal local road network.

3.2 Road Hierarchy Overview

The proposed road hierarchy within the CA3 South area generally aligns with approvals and planning to date, and EDQ's Guideline No. 6 – Street and Movement Network.

Typical cross-section parameters for each of the proposed hierarchies are detailed in Table 3.1.

Table 3.1: Typical Road Cross-Section Parameters

Road Hierarchy	Reserve	Pavement	Lanes	Parking	Bus	Footpath	Dedicated Cycle	Trunk
Arterial (4-Lane)	32m	14m	4	No	Yes	1.5m (both sides)	2.4m two-way (both sides)	Yes
Trunk Connector (4-Lane)	32m	14m	4	No	Yes	3m shared path (one side) +1.5m (one side)	3.0m two-way (one side)	Yes
Trunk Connector (2-Lane)	23.8m	11.8m	2	Yes	Yes	3m shared path (one side) +1.5m (one side)	3.0m two-way (one side)	Yes
Neighbourhood Connector	21m	11.2m	2	Yes	Yes	1.5m (one side)	3m shared path (one side)	No
Neighbourhood Access	16.5m	7.5m	2	On-Street	No	1.5m (one side)	On-road	No
Esplanade Road	14.5m	8.3m	2	Yes (one-side)	No	1.5m (one side)	On-road	No
Neighbourhood Lane	6.5m	5.5m	2	No	No	No	No	No
Wide Neighbourhood Lane	14.8m	5.5m	2	Yes (Angled)	No	No	No	No

The proposed road network hierarchies are illustrated in Figure 3.1 for key roads i.e. connector and trunk roads, with illustrations of the proposed cross-sections provided at **Appendix B**.

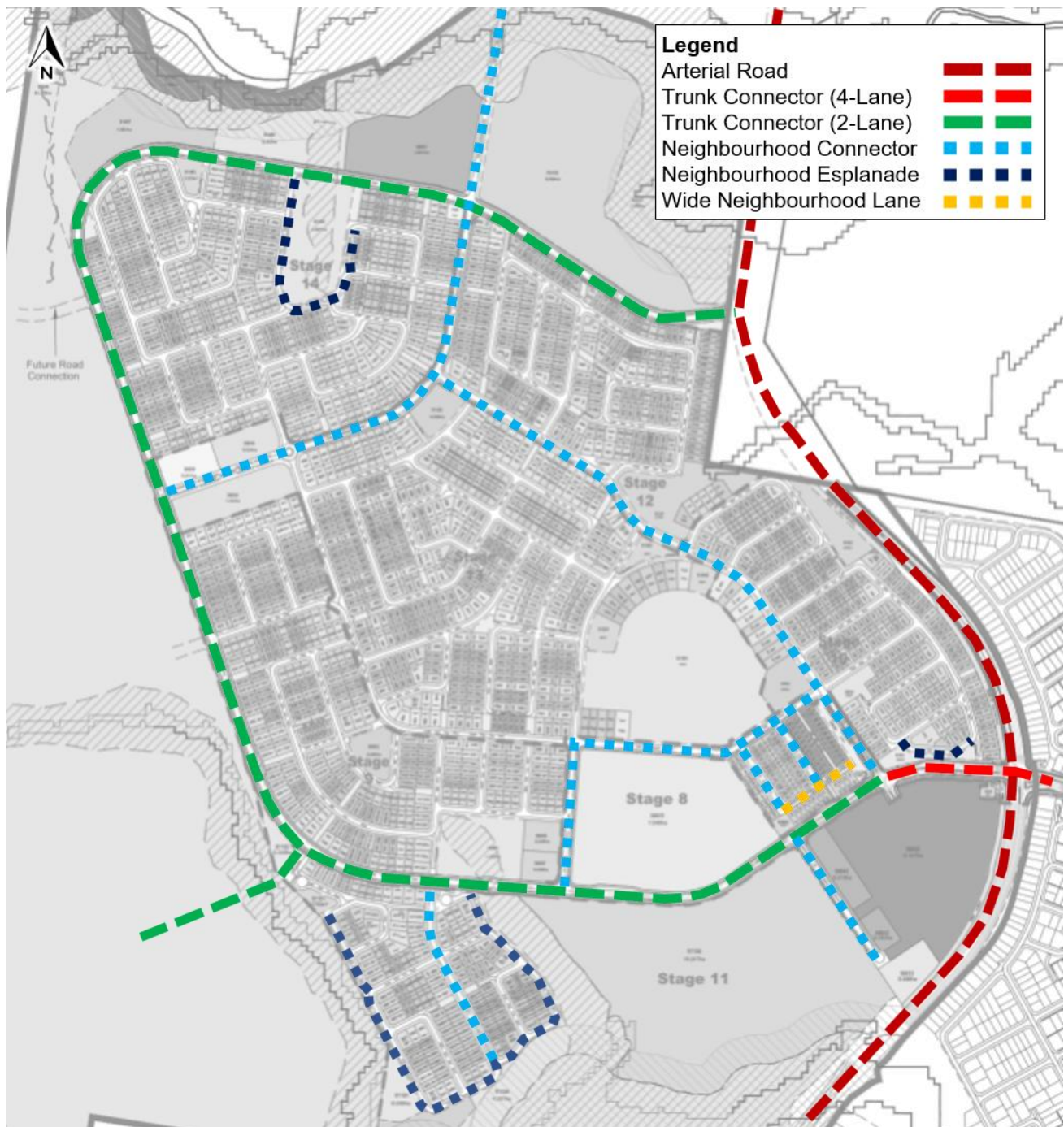


Figure 3.1: Proposed Road Network Hierarchies (TBC)

As detailed above, the road cross-sections are generally consistent with the endorsed Movement IMP and endorsed CA3 S plans and traffic reporting. Compared to the IMP, a marginal increase in verge width is proposed for 2-lane trunk connector and neighbourhood connector road types. This is to ensure sufficient width for required active transport provisions and services within the road reserve. A wide laneway road type is proposed in Stage 9N and Stage 9M-2. This road is intended to provide angled on-street parking to support visitor parking demands for the surrounding terrace allotments. The proposed cross-section of this wide neighbourhood lane is illustrated in Figure 3.2.

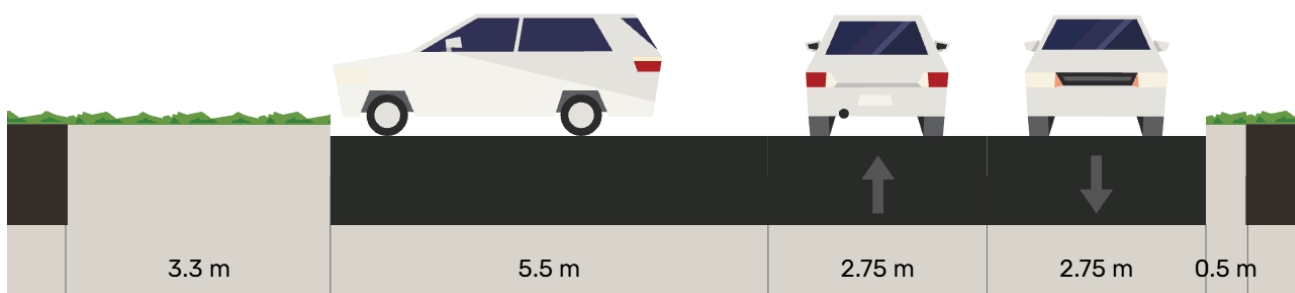


Figure 3.2: Wide Neighbourhood Lane Cross-Section

Sufficient parking and lane width is present within the above cross-section for angled parking as per the requirements of AS2890.5: On-street Parking.

3.3 Intersections

Key principles for the proposed intersection forms and their locations were as follows:

- Intersections with four-lane roads shall be signalised or otherwise restricted to left-in / left-out
- Roundabouts shall be minimised however are considered appropriate at four-way intersections, where servicing a primary component of residential land uses
- Intersection spacings shall generally comply with those specified in EDQ's Guideline No. 6 for the relevant hierarchy.

Modifications to the road network proposed as a part of the change application impact local access roads only. As such, no changes are proposed to the location or form of intersections on trunk roads or neighbourhood connector roads within CA3 South.

3.4 Access Considerations

Determination of access locations has not yet been undertaken throughout the subject site and should be the subject of further applications for specific developments. That said, the proposed road network and land use arrangements have considered future access locations at a high level such as, loading / servicing requirements, car parking access, direct lot access etc.

As such, a base set of principles shall be adhered to when determining access locations through future applications and shall be provided in accordance with the following general requirements:

- Property accesses shall be provided on a property's lower order frontage road where practical
- Direct property access should be minimised on Trunk Connector roads where traffic volumes >10,000 veh/d or posted speeds >60km/h
- Property accesses shall be clear of prohibited access locations, in particular:
 - Be located clear of nearby intersections as per AS2890.1
 - Be located outside of the functional area of an intersection to avoid queuing impacts
 - Be provided perpendicular to the road unless designed as a one-way access for ease of manoeuvring
- Vehicle crossover design and separation of vehicle crossovers shall be as per the relevant requirements of IPWEAQ Standard Drawings RS-049, RS-050 and RS-051 and Logan City Council requirements.

As mentioned, detailed access design shall be undertaken with each future development application and apply the above general principles to ensure there is no adverse impact to the surrounding road network and that safety is not compromised.

4. TRAFFIC ASSESSMENT

4.1 Strategic Modelling

4.1.1 Overview

Veitch Lister Consulting Pty Ltd (VLC) were previously engaged to produce strategic models of the Flagstone PDA including PEET's development area. Strategic models were developed within VLC's Zenith model of Southeast Queensland with a cordon of the study area taken from the Greater Flagstone Strategic Traffic Model (GFSTM) to provide data relevant to PEET land to inform microsimulation (Aimsun) modelling.

A review of this model cordon was undertaken in comparison to the more recently developed South Logan Strategic Traffic Model (SLSTM) with similar strategic modelling outputs noted within the Flagstone PDA between the GFSTM and SLSTM models. As such, despite updated planning within the South Logan region, key Flagstone City strategic model outcomes remain relevant for the purpose of Aimsun modelling, detailed further below.

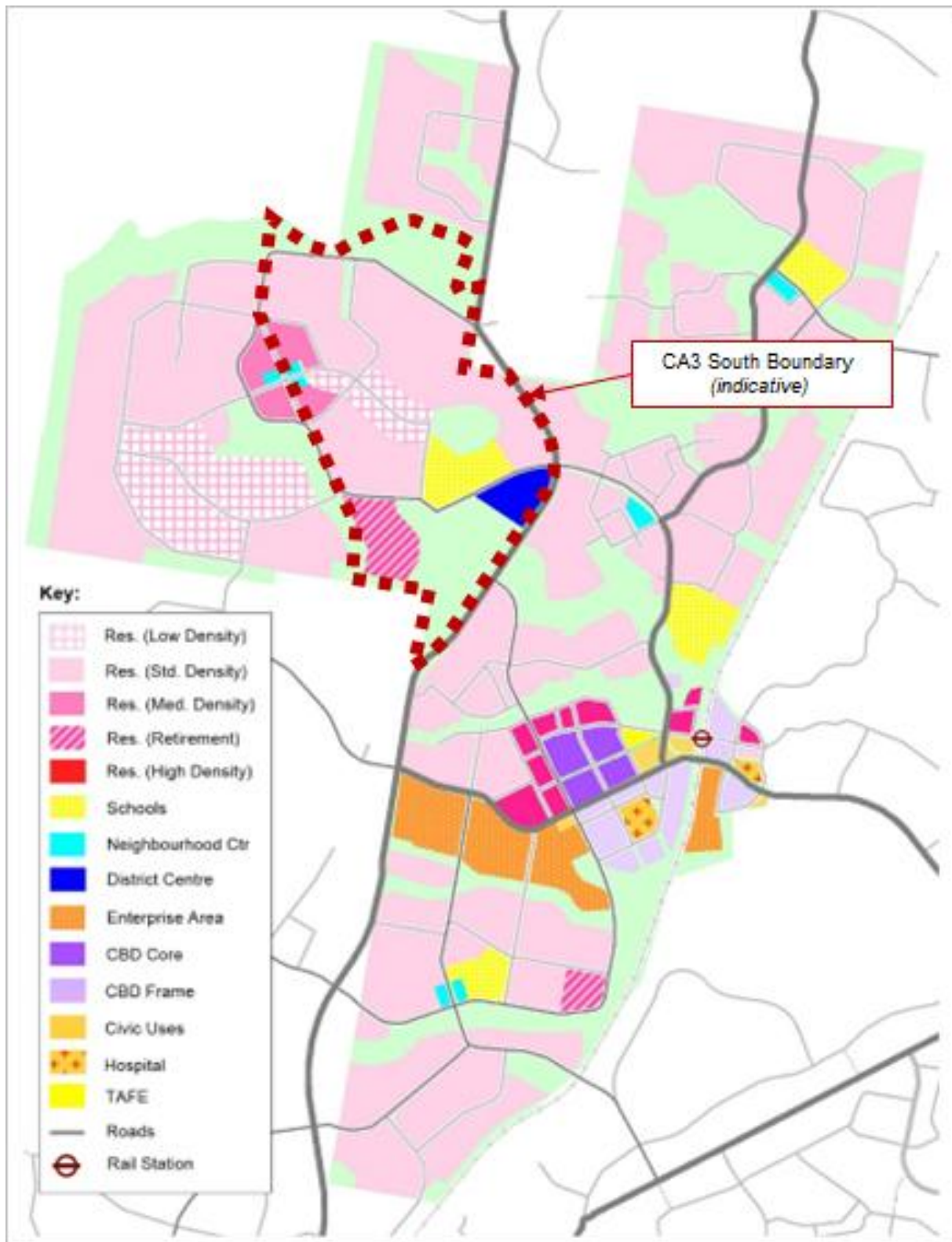
The details of the strategic modelling methodology and outcomes is documented in VLC's Cordon Modelling report for PEET (May 2019).

4.1.2 Land Use Plan

The land use patterns assumed in VLC's Flagstone City strategic model for the Ultimate (2066) development scenario are shown overleaf in Figure 4.1.

The development of this land use plan within the VLC model was done in such a way using single use zones such that land parcels are capable of being relocated throughout the development area (and within the model's origin-destination (OD) demand matrix) to account for changes in planning and land use proposals.

Regardless, Figure 4.1 is representative of the VLC modelling completed on behalf of PEET.



Source: VLC Cordon Modelling of PEET's Flagstone City – Final Report

Figure 4.1: 2066 Flagstone City Land Use Plan

4.2 Microsimulation Modelling

4.2.1 Overview

A 2066 microsimulation model of the Flagstone City area was prepared by Bitzios using Aimsun Next 23.0.2 traffic modelling software. This model was prepared to evaluate route choice and provide detailed insight into vehicle trip movements within Flagstone City. This facilitates analysis of road link and intersection performance at a higher level of detail than possible with strategic modelling undertaken. This model was developed as a part of the development of the now endorsed Movement Network IMP and further refined for subsequent applications within Flagstone City.

The Flagstone City road network as modelled in Aimsun is illustrated in Figure 4.2.

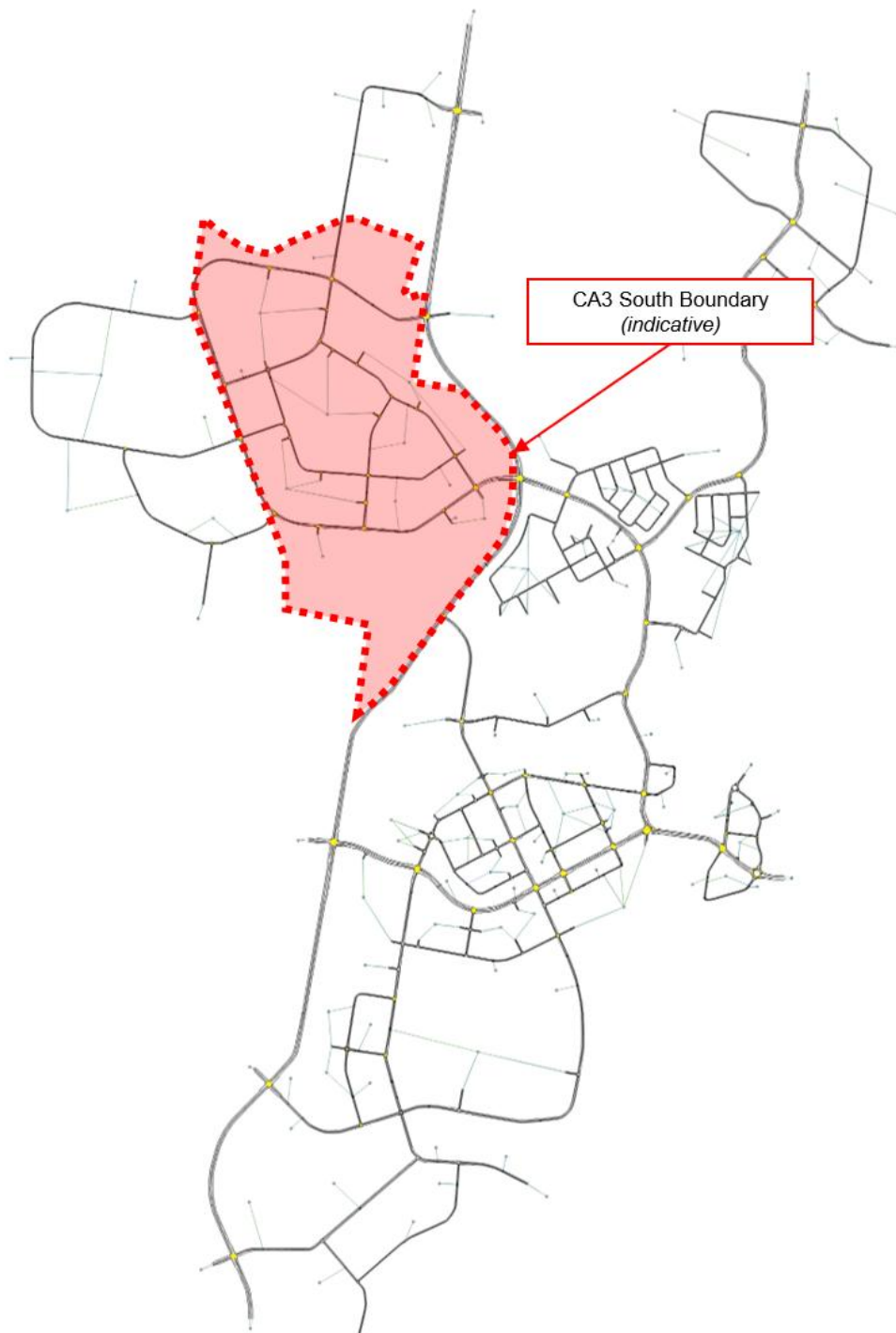


Figure 4.2: Flagstone City Microsimulation (Aimsun) Model Network

4.2.2 Model Time Periods & Profiling

The strategic model cordon provided 2-hour AM and PM peak traffic volumes. In the ultimate (2066) model year, these volumes are multiplied by a factor of 0.53 to determine peak hour traffic volumes, as per the average of VLC's SEQ strategic model.

Given the study area of the model is predominantly greenfield, network peak hours are unknown. As such, AM and PM peak hours are arbitrarily assumed as follows:

- AM Peak: 07:30 – 08:30
- PM Peak: 16:30 – 17:30

The model also includes a 30-minute 'warm-up' and 'cool-down' period for each peak.

4.2.3 Zone System & Traffic Generation

The zone system for the microsimulation model was generally adopted as per the VLC strategic modelling with OD matrices of the study area taken from the cordon of the strategic model. This approach was taken to ensure as close to zone equivalence as possible with the VLC modelling.

With further development progression, significant changes in areas of the Flagstone City Structure Plan have occurred since the VLC cordon matrices were developed. To account for modified land uses and the updated scale of development expected in some stages, OD matrices for input into the microsimulation model have been updated accordingly as detailed in the endorsed movement IMP.

With the development of the proposed CA3, model zones within CA3 have been further refined to reflect the additional detail reflected in the plan. Subsequent scaling of OD demands for zones is outlined in Table 4.1, based on dwelling numbers for residential zones and developable area for non-residential zones.

Table 4.1: Aimsun Model 2066 OD Demand Updates

Zone ID	Land Use	VLC Cordon Model		CA3 South Plan		Zone Scaling
		Model Area (ha)	Dwellings	Zone Area (ha)	Dwellings	
3942	Local Centre	1.66	-	2.48	-	149.3%
3946	Low Density Residential	12.75	765	-	401	52.4%
3947	School	7	-	7.00	-	100%
3948	Low Density Residential	4.8	29	-	165	569.0%
3949	Low Density Residential	5.67	33	-	24	72.7%
3952	Medium Density Residential	3.38	85	0.905	54 ¹	63.5%
3953	Low Density Residential	3.07	77	-	60	77.9%
3954	Medium Density Residential	5.35	134	-	100	74.6%
3955	Low Density Residential	23.17	280	-	401	143.2%
3956	Low Density Residential	21.64	259	-	324	125.1%
3957	Low Density Residential	40	573	-	458	79.9%
3958	District Centre	7.6	-	6.75	-	88.8%

¹Dwellings has been estimated as a rate of 60 dwellings per hectare

The relevant zones are shown graphically in Figure 4.3.

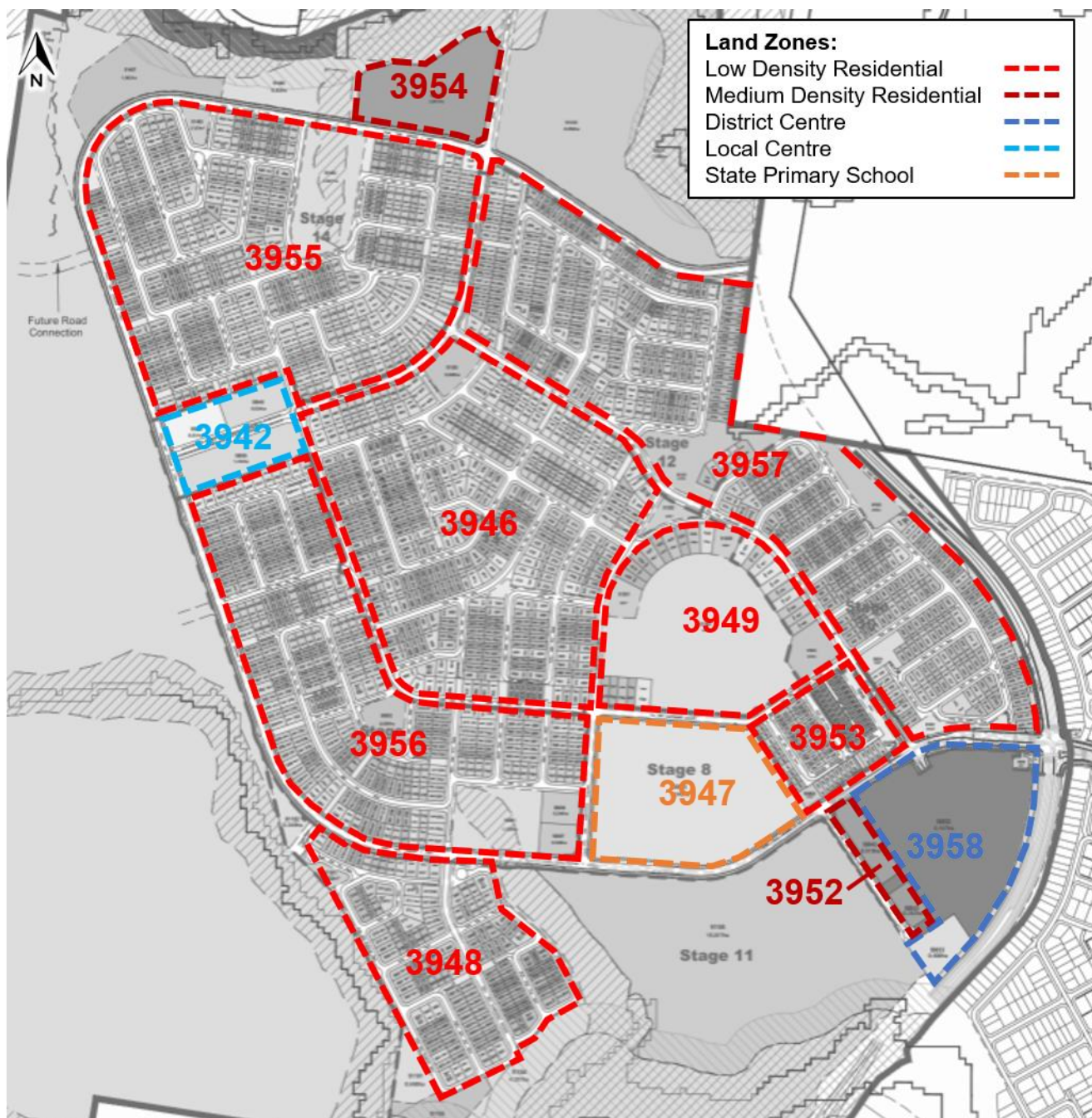


Figure 4.3: Town Centre Zone ID's & Uses

4.2.4 Microsimulation Model Output Overview

Link densities and link delays during the peak hours within the modelled CA3 South area are illustrated in Figure 4.4 to Figure 4.7.

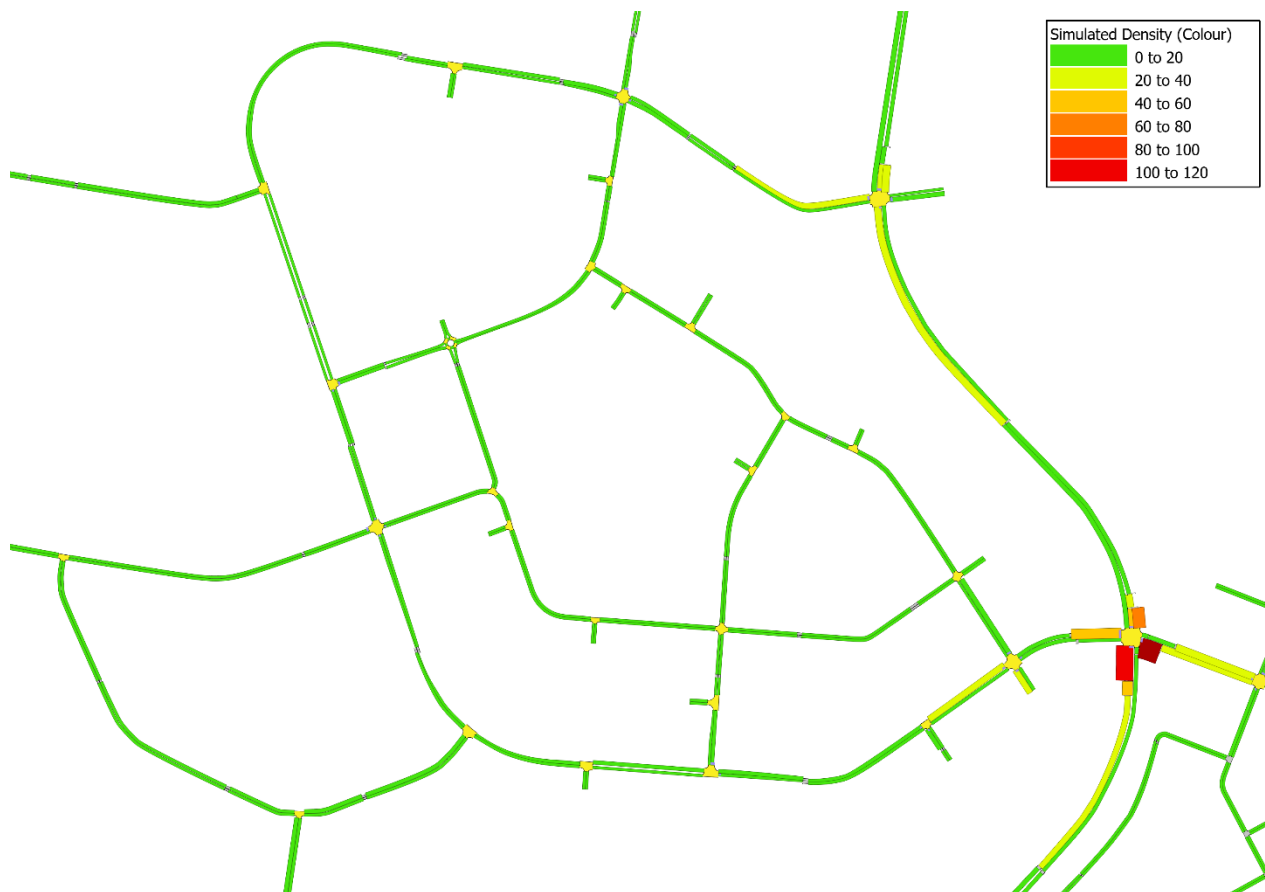


Figure 4.4: AM Peak Link Density



Figure 4.5: PM Peak Link Density



Figure 4.6: Microsimulation Link Delays - AM Peak



Figure 4.7: Microsimulation Link Delays - PM Peak

As shown, link delays largely occur through key signalised intersections as delays are inherent with a signalised intersection given all vehicles are required to stop at some point. That said, based on the delay results, links are typically expected to be within acceptable performance limits. These signalised intersection delays are typical in an urban environment and considering the forecast growth to the ultimate 2066 design year. Regardless, further assessment of these intersections is detailed further below.

4.3 Intersection Assessment

4.3.1 Overview

The key intersections assessed comprise of future trunk intersections identified in the endorsed Movement IMP as well as additional signalised intersections within the CA3 South area itself. The intersections assessed and their relevant ID are shown in Figure 4.8.

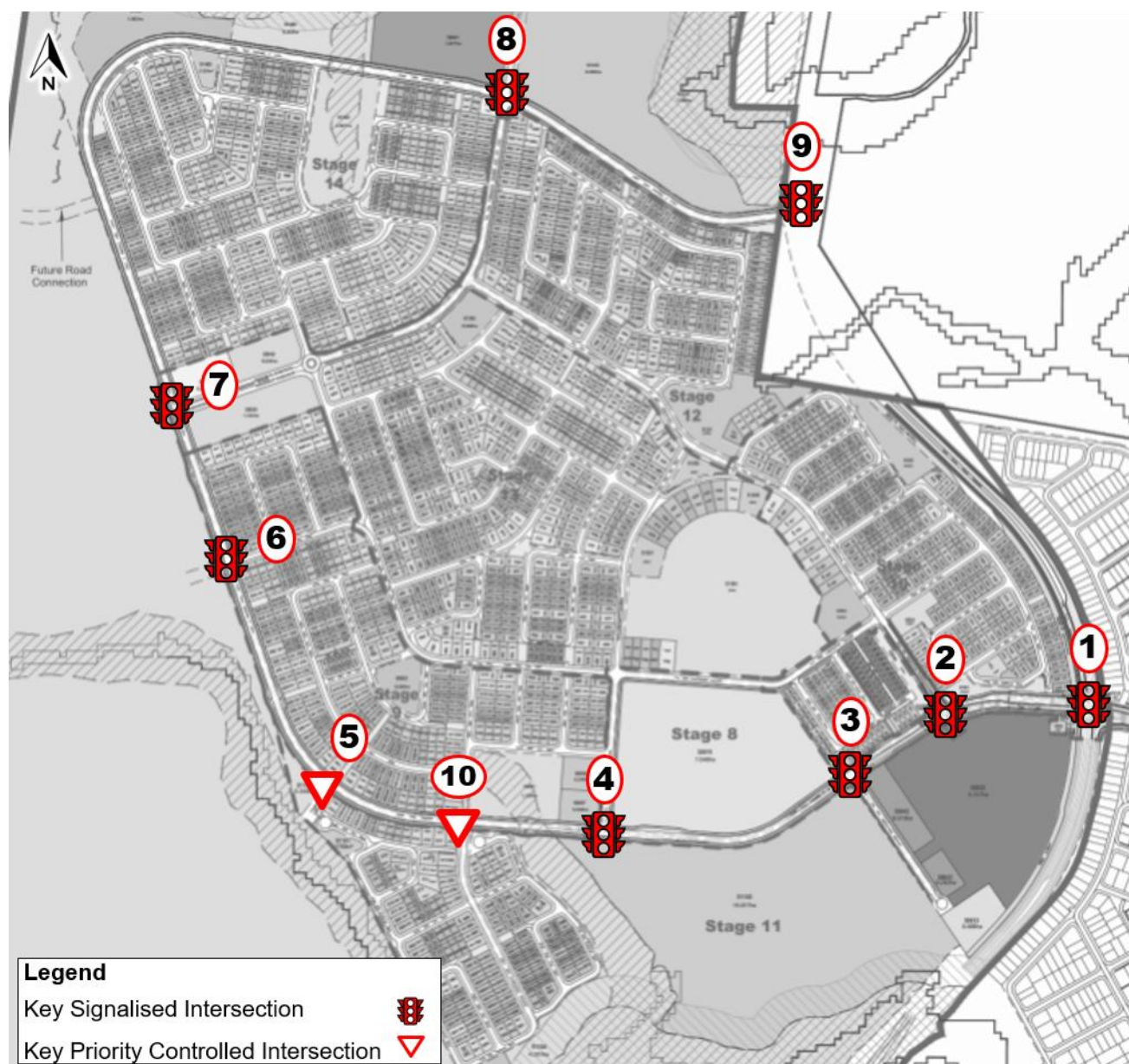


Figure 4.8: Key Intersections

4.3.2 Intersection Forms and Footprints

Key intersection layouts were transferred into SIDRA Intersection (v9.1) based on the Aimsun model layouts and assessed using peak flows extracted from the Aimsun models. This was to gain an indication of critical peak performance at the intersection level.

The resultant intersection forms and layouts are indicative only and subject to change based on further detailed assessment associated with future stages of development. Importantly, ultimate intersection forms are based on 2066 planning (40 years into the future) which may be subject to change over time. For a conservative assessment, signalised intersections are assumed to have pedestrian movements of 50 vehicles per hour on all legs of the intersection.

NOTE: turn pocket lengths indicated on SIDRA layouts are indicative only and subject to design to accommodate queuing, deceleration and operational factors.

4.3.3 Intersection Assessment Summary

A summary of the SIDRA intersection results for the key intersections identified is outlined in Table 4.2. Detailed SIDRA outputs are provided in **Appendix C**.

Table 4.2: SIDRA Intersection Results Summary

Intersection ID	DOS (v/c)		Avg. Delay (s)		LOS	
	AM	PM	AM	PM	AM	PM
1	0.86	0.86	53	52	D	D
2	0.54	0.55	44	39	D	C
3	0.70	0.76	16	18	B	B
4	0.67	0.85	14	19	B	B
5	0.50	0.22	7	6	A	A
6	0.26	0.41	10	18	A	B
7	0.13	0.23	8	8	A	A
8	0.58	0.67	21	26	C	C
9	0.85	0.87	48	44	D	D
10	0.24	0.26	1	1	A	A

As shown, with forecast ultimate (2066) traffic volumes, intersections are expected to generally operate within acceptable performance limits in the AM and PM peak hours.

Compared to the endorsed CA3 South traffic assessment, a revised New Beith Road / Flagstonian Drive layout is proposed following liaison with Logan City Council. The revised layout was proposed to improve intersection performance, remove the left-turn trap lane and add a pedestrian crossing on the northern leg. Modelling of the revised layout, as shown above, demonstrates that the revised intersection form addresses issues raised by Logan City Council and provides a New Beith Road / Flagstonian Drive layout that can cater for ultimate (2066) traffic volumes.

5. ALTERNATIVE TRANSPORT PROVISIONS

5.1 Public Transport

Regional and local bus routes are proposed throughout Context Area 3 generally in accordance with the endorsed Movement IMP and the Context Area plan. Exact bus stop locations through the masterplan area are subject to consultation with TMR / TransLink and may be determined as a part of further applications for specific stages of the CA3 South. Regardless, indicative locations of bus stop pairs within the CA3 site area are shown in Figure 5.1 demonstrating a high level of expected public transport coverage within the town centre.



Figure 5.1: Indicative Public Transport Coverage

Where possible, bus stops are located close to signalised intersections to allow road crossings to take place via the signalised crossing(s). Where midblock stops are proposed, these are generally co-located with green space / 'pedestrian linkages' to the nearby residential catchment. This affords residents / passengers with more direct connection points from the stop infrastructure / bus service.

As shown, the majority of the proposed development area is located within reasonable walking distance of a future public transport route / stop, with only a small portion of lots (32 dwellings) outside of the 400m radius. Consistent with public transport requirements of the Flagstone Development Scheme, the indicative bus stop locations identified will result in approximately 98.3% of residential dwellings to be located within walking distance of a bus stop.

Note that bus stop types shall be subject to future applications and detailed design and be in accordance with the PTIM. Bus stops are typically to be provided as inline 'regular' bus stops requiring localised widening of the on-street parking lane to 2.5m wide to cater for the bus stop. Bus stops located on New Bieth Road and fronting the district centre are recommended as intermediate indented bus stops, to be 3m wide in accordance with the PTIM.

5.2 Active Transport Provisions

5.2.1 Overview

Pedestrian and cycle infrastructure will be provided throughout the masterplan area both within the road reserve and outside the road reserve through park linkages and private / shared pedestrian zones.

Major active transport links with separated cycle tracks and pedestrian paths within the road reserve are proposed within:

- New Bieth Road (North-south adjacent the CA3 South area)
- 2-lane trunk roads (encircling the majority of the CA3 South area)
- The Regional Sport Park (through the parklands).

Shared paths shall also be provided on the frontage of the state primary school site. Parks, open space and pedestrian linkages are also proposed throughout the site area, with a large number of linkages between residential lots to provide direct pedestrian access between local neighbourhoods and the wider active (and public) transport network.

5.2.2 Active Transport Strategy Development

An active transport strategy was developed for the site area to deliver a hierarchy of active transport provisions. The strategy is based on:

- Key active transport attractors
- Relevant user types
- Key active transport desire line routes.

Key active transport attractors consist of the major land uses including retail/commercial centres, schools, and various types of parklands. These land uses are expected to attract a substantial active transport demand from the residential lots throughout the site area

The key attractors and key pedestrian desire line routes through the site area are depicted in Figure 5.2 and provided in **Appendix D**.

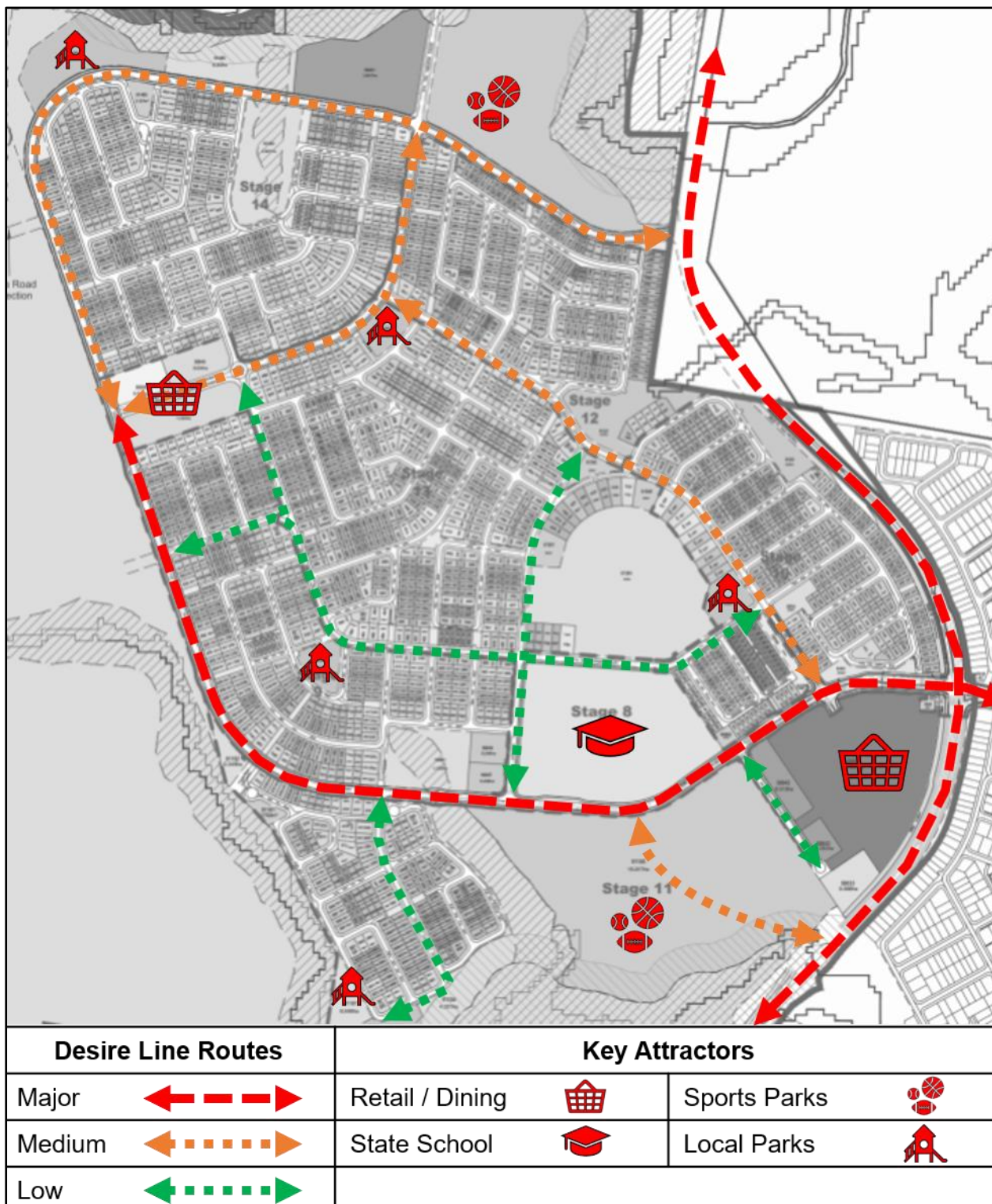


Figure 5.2: Key Attractors and Active Transport Desire Line Routes

Based on the above attractors and desire line routes, an active transport route hierarchy was developed to specify a set of criteria and relevant infrastructure based on route classification.

The overarching hierarchy classification considers three levels, being:

- Major
- Medium
- Low.

The hierarchy does not suggest any lower level of importance or quality of infrastructure, rather defines the type of trip attractors/generators and user types that are most likely to use the prevailing facility, and therefore assist in the determination of an appropriate facility/infrastructure type.

For example:

a Major classification applies to routes / infrastructure that service multiple trip attractors such as connections between schools, parklands and major retail centres. This hierarchy may warrant a wider treatment due to a higher volume of active transport users.

a Low classification applies to routes / infrastructure that primarily service the immediate catchment, are not expected to service a large number of user types and warrant pathway treatments within the road reserve e.g. 1.5m footpath(s).

The route hierarchy criteria are summarised in Table 5.1.

Table 5.1: Criteria to Determine Route Hierarchy

Classification	Criteria	Infrastructure
Major	Provides connections: - Within or between key centres - To schools, shopping centres, transit hubs/stops - Along major, higher volume transport routes	Includes: - Separated cycleways - Shared paths outside road reserve - Shared paths $\geq 3\text{m}$ inside road reserve both sides of road
Medium	Provides connections: - Within and between residential areas - To major active transport routes - To open space / parks - To public transport stops	Includes: - Shared path inside road reserve one side - Shared paths $\leq 3\text{m}$ inside road reserve both sides of road - Pathways outside road reserve (open space)
Low	Provides connections: - Within immediate catchment (400m) - On lower order, lower volume transport routes	Includes: Pathways inside road reserve one side (e.g. 1.5m footpath)

The key active transport linkages throughout the site area were therefore developed adopting the strategy of key attractors, key desire line routes and the criteria outlined in the route hierarchy classification. The key active transport linkages and route hierarchy is shown in Figure 5.3.

As shown, the proposed key active transport linkages are considered to provide a high-level of service and accessibility for the CA3 South site and provide connectivity to surrounding services and properties. The proposed connections also generally align with the active transport components of the endorsed Movement IMP.

Further, the DCOP identifies an off-road shared path through the Regional Sport Park and along the southern extent of the CA3 area. While not specifically identified on the plan included at **Appendix A**, the proposal does not preclude part provision of this path, and this off-road shared path is recommended to form part of any future approvals relating to the sports park.

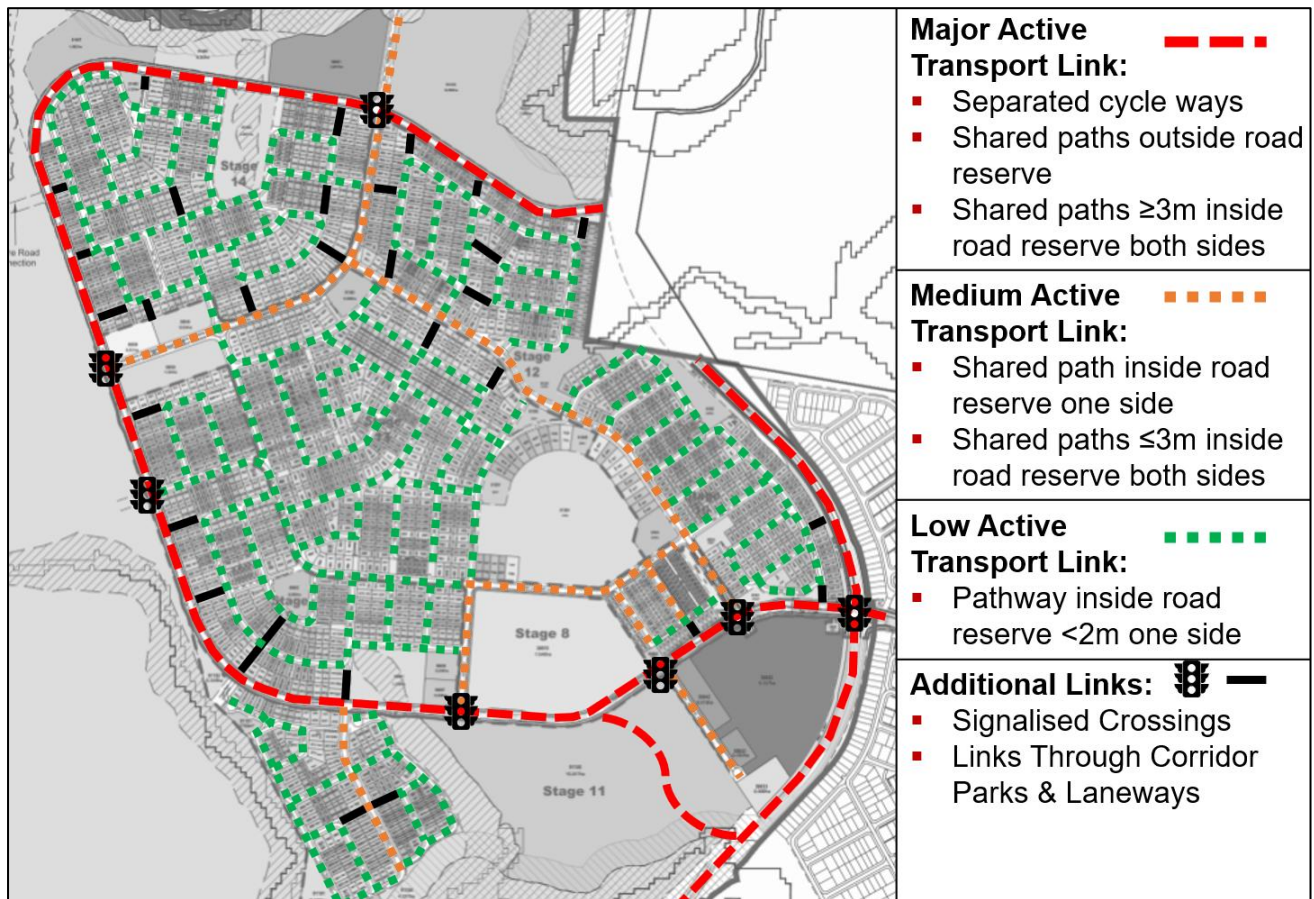


Figure 5.3: Active Transport Linkages

6. SUMMARY & CONCLUSIONS

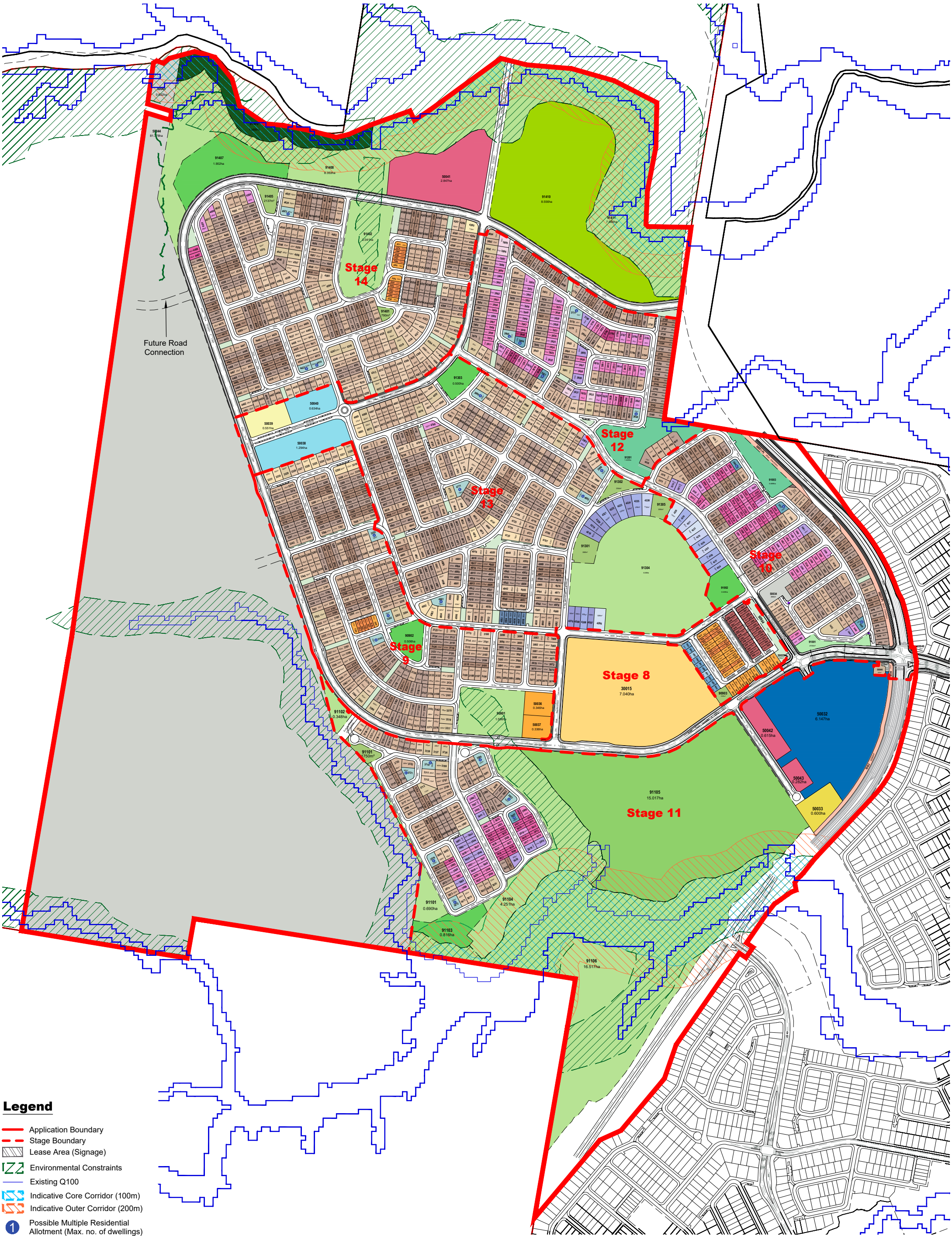
The traffic and transport findings for the Flagstone Town Centre Masterplan are summarised below:

- The proposed development application is for changes to Stage 9 and Stage 13 within the southern portion of Context Area 3 (CA3 South) of Flagstone City
- The proposed changes do not substantially alter the proposed land uses or trunk road network within CA3 South, with changes to the internal local road network and a minor increase in residential yield proposed
- Proposed road cross-sections are generally consistent with the endorsed Movement Network IMP and current CA3 South approval with slightly increased verge width on 2-lane trunk connector and neighbourhood connector roads
- Strategic traffic modelling was undertaken by VLC for which cordon matrices were extracted for the development of microsimulation (Aimsun) traffic models of Flagstone City, this process has been used throughout all previous application material and as such, presents a consistent approach to determining road network / intersection requirements
- Microsimulation modelling indicates that CA3 links are typically expected to be within acceptable performance limits with some delays noted on approaches to signalised intersections on trunk roads. This is typical of signalised intersections in an urban environment, noting the 2066 design year adopted for the ultimate assessment
- Overall findings of intersection modelling of key intersections demonstrate that, based on current estimates of future traffic volumes, key intersections as detailed can cater for peak traffic demands within CA3 south
- Approximately 98% of the proposed site is located within 400m of a future bus route / stop / service achieving the public transport requirements of the Development Scheme. Stops are generally located close to signalised intersections (crossings) or midblock adjacent green pedestrian links
- The CA3 South site is considered to provide a highly accessible active transport network, with a range of route options both within and outside the road reserve. The proposed connections also generally align with the active transport components of the Movement IMP and do not preclude the off-road shared path provisions identified in the DCOP.

Based on the above assessment, it is concluded that the proposed road network, intersection arrangements and alternate transport provisions are expected to accommodate transport demands associated with the proposed CA3 South development.

Appendix A: CA3 South Layout





- Legend**
- Application Boundary
 - Stage Boundary
 - Lease Area (Signage)
 - Environmental Constraints
 - Existing Q100
 - Indicative Core Corridor (100m)
 - Indicative Outer Corridor (200m)
 - Possible Multiple Residential Allotment (Max. no. of dwellings)

TO BE READ IN CONJUNCTION WITH 110056-640 STAGES 8-14 OVERALL STATISTICS

PLAN REF: 110056 – 639
Rev No: I
DATE: 22 JULY 2026
CLIENT: PEET
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0 100 200 300 400 500 1 : 7,500 @ A3

FLAGSTONE CA3 SOUTH
STAGES 8 - 14
OVERALL PLAN OF SUBDIVISION

PEET

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CA3 SOUTH - Stage 8 - 14 Yield Breakdown									
Lot Type	Stage 8	Stage 9	Stage 10	Stage 11	Stage 12	Stage 13	Stage 14	Overall	
	Yield	Yield	Yield	Yield	Yield	Yield	Yield	Yield	%
20.5m Deep Product									
Premium Villa 12.5m Allotment	—	8	—	—	—	—	—	8	0%
Courtyard 14m Allotment	—	2	—	—	—	—	—	2	0.1%
Subtotal	—	10	—	—	—	—	—	10	1%
25m Deep Terrace Product									
Terrace 9.5m Allotment	—	24	—	—	—	—	—	24	1%
Subtotal	—	24	—	—	—	—	—	24	1%
25m Deep Product									
Villa 10.5m Allotment	—	—	25	17	7	—	—	49	3%
Premium Villa 12.5m Allotment	—	—	24	17	39	—	2	82	5%
Courtyard 14m Allotment	—	—	12	12	31	1	3	59	3%
Premium Courtyard 16m Allotment	—	—	4	11	4	1	—	20	1%
Premium Traditional 20m Allotment	—	—	—	—	4	—	—	4	0%
Possible Multiple Residential Allotment	—	—	3	1	2	—	—	6	0%
Subtotal	—	—	68	58	87	2	5	220	12%
28m Deep Product									
Terrace 7.5m Allotment	—	15	—	—	—	—	10	25	1%
Terrace 9.5m Allotment	—	30	—	—	—	—	4	34	2%
Subtotal	—	45	—	—	—	—	14	59	3%
30m Deep Product									
Terrace 9.5m Allotment	—	—	—	—	—	6	—	6	0.3%
Villa 10.5m Allotment	—	47	40	12	27	40	52	218	12%
Premium Villa 12.5m Allotment	—	92	66	28	64	122	111	483	27%
Courtyard 14m Allotment	—	117	32	33	42	133	152	509	28%
Premium Courtyard 16m Allotment	—	26	3	10	10	61	43	153	9%
Traditional 18m Allotment	—	7	—	—	—	11	—	18	1%
Premium Traditional 20m Allotment	—	10	1	6	4	12	16	49	3%
Possible Multiple Residential Allotment	—	3	—	6	3	5	3	20	1%
Subtotal	—	302	142	95	150	390	377	1456	81%
50m+ Deep Product									
Courtyard 14m Allotment	—	—	—	—	—	8	—	8	0%
Premium Courtyard 16m Allotment	—	—	5	—	—	4	—	9	1%
Traditional 18m Allotment	—	—	3	—	—	1	—	4	0%
Premium Traditional 20m Allotment	—	—	2	—	—	1	—	3	0%
Subtotal	—	—	10	—	—	14	—	24	1%
Total Residential Allotments	—	381	220	153	237	406	396	1793	100%
Residential Net Density	—	17.9 dw/ha	14.9 dw/ha	13.1 dw/ha	16.0 dw/ha	14.0 dw/ha	15.1 dw/ha	15.1 dw/ha	
Super Lots									
Local Centre	—	—	—	—	—	12	—	12	
District Centre	—	—	—	1	—	—	—	1	
Ambulance	—	—	—	1	—	—	—	1	
Child Care	—	2	—	—	—	—	—	2	
Community Centre	—	—	—	—	—	—	—	—	
State Primary School	1	—	—	—	—	—	—	1	
Medium Density Allotment	—	—	—	2	—	—	1	3	
Balance Allotment	—	—	5	—	—	—	2	7	
Management Lot	—	—	2	1	—	—	—	3	
Subtotal	1	2	7	5	—	12	3	30	
Utilities									
Water Booster Pump Station	—	—	1	—	—	—	—	1	
Water Booster Pump Station	—	—	1	—	—	—	—	1	
Total Allotments	1	383	228	158	237	418	399	1824	
Maximum Potential Residential Dwellings (Includes Multiple Residential Allotments)	—	384	223	165	245	415	401	1833	
Maximum Potential Net Residential Density	—	18.1 dw/ha	15.1 dw/ha	14.1 dw/ha	16.5 dw/ha	14.3 dw/ha	15.3 dw/ha	15.4 dw/ha	

CA3 SOUTH - Stage 8 - 14 Land Budget									
Land Use	Stage 8	Stage 9	Stage 10	Stage 11	Stage 12	Stage 13	Stage 14	Overall	
	Area	Area	Area	Area	Area	Area	Area	Area	%
	7.040 ha	25.949 ha	19.675 ha	65.728 ha	16.235 ha	37.815 ha	144.017 ha	316.459 ha	100.0%
Saleable Area									
Residential Allotments	—	14.689 ha	8.688 ha	6.282 ha	9.687 ha	18.293 ha	16.506 ha	74.145 ha	23.4%
Medium Density	—	—	—	0.897 ha	—	—	2.847 ha	3.744 ha	1.2%
Local Centre	—	—	—	—	—	1.928 ha	—	1.928 ha	0.6%
District Centre	—	—	—	6.147 ha	—	—	—	6.147 ha	1.9%
Ambulance	—	—	—	0.600 ha	—	—	—	0.600 ha	0.2%
Child Care	—	0.682 ha	—	—	—	—	—	0.682 ha	0.2%
Community Centre	—	—	—	—	—	0.551 ha	—	0.551 ha	0.2%
State Primary School	7.040 ha	—	—	—	—	—	—	7.040 ha	2.2%
Management Lot	—	—	0.528 ha	0.359 ha	—	—	—	0.887 ha	0.3%
Total Area of Allotments	7.040 ha	15.371 ha	9.216 ha	14.285 ha	9.687 ha	20.771 ha	19.353 ha	95.723 ha	30.2%
Utilities									
Water Booster Pump Station	—	—	0.065 ha	—	—	—	—	0.065 ha	0.0%
Area of Utilities	—	—	0.065 ha	—	—	—	—	0.065 ha	0.0%
Road									
North South Arterial Dedication (incl. batters)	—	—	3.004 ha	9.049 ha	—	—	0.137 ha	12.190 ha	3.9%
Trunk Connector 2 Lanes (23.8m)	—	2.485 ha	0.914 ha	0.143 ha	—	0.328 ha	4.173 ha	8.043 ha	2.5%
Neighbourhood Connector (21m)	—	0.414 ha	1.197 ha	1.227 ha	1.696 ha	1.111 ha	0.643 ha	6.288 ha	2.0%
Neighbourhood Access Street (16.5m)	—	4.829 ha	3.389 ha	3.116 ha	3.185 ha	7.491 ha	6.185 ha	28.194 ha	8.9%
Laneway (6.5m)	—	0.119 ha	—	—	—	0.060 ha	0.082 ha	0.261 ha	0.1%
Pedestrian Linkages	—	0.330 ha	0.030 ha	0.089 ha	0.246 ha	0.467 ha	0.621 ha	1.782 ha	0.6%
Total Area of New Road	—	8.177 ha	8.534 ha	13.624 ha	5.126 ha	9.457 ha	11.841 ha	56.758 ha	17.9%
Open Space									
Conservation Buffer	—	—	—	—	—	—	1.988 ha	1.988 ha	0.6%
Corridor Park / Conservation	—	1.556 ha	—	21.814 ha	—	6.348 ha	18.056 ha	47.774 ha	15.1%
Stormwater Management	—	—	0.699 ha	—	1.423 ha	—	—	2.122 ha	0.7%
Regional Sports	—	—	—	15.017 ha	—	—	—	15.017 ha	4.7%
District Sports	—	—	—	—	—	—	8.556 ha	8.556 ha	2.7%
Neighbourhood Recreation Park	—	0.506 ha	0.539 ha	0.816 ha	—	0.500 ha	1.903 ha	4.264 ha	1.3%
Local Recreation Park	—	0.102 ha	—	0.175 ha	—	0.742 ha	0.293 ha	1.312 ha	0.4%
Local Linear Recreation Park	—	0.259 ha	0.272 ha	—	—	—	—	0.531 ha	0.2%
Total Open Space	—	2.423 ha	1.510 ha	37.822 ha	1.423 ha	7.590 ha	30.796 ha	81.564 ha	25.8%
Balance Allotments									
Balance Allotment	—	—	0.349 ha	—	—	—	82.024 ha	82.373 ha	26.0%
Total Balance Allotments	—	—	0.349 ha	—	—	—	82.024 ha	82.373 ha	26.0%

PLAN REF: 110056 – 640

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FLAGSTONE CA3 SOUTH
STAGES 8 - 14
OVERALL PLAN OF SUBDIVISION STATISTICS

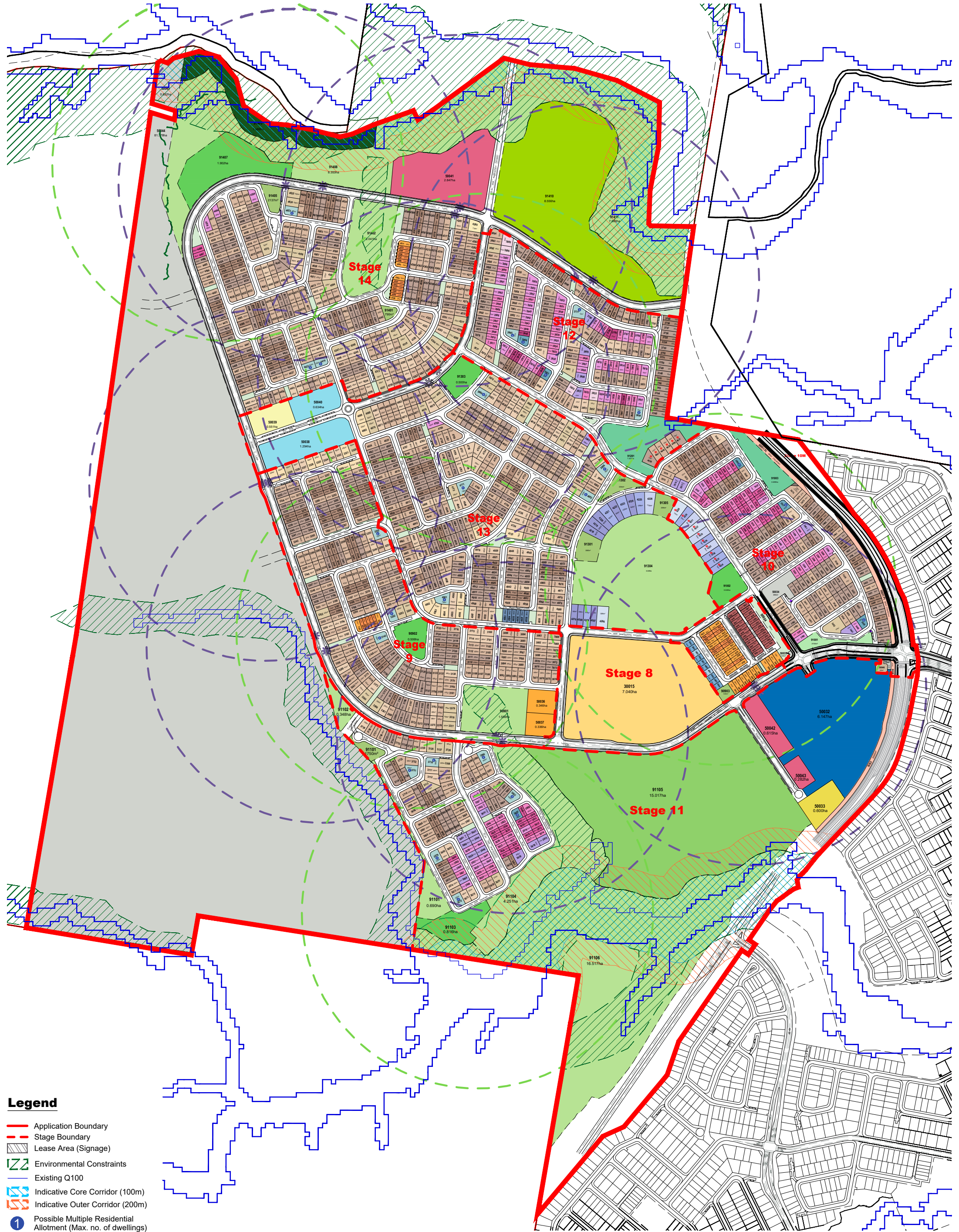
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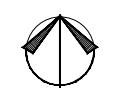
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- Legend**
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 - Indicative Core Corridor (100m)
 - Indicative Outer Corridor (200m)
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TO BE READ IN CONJUNCTION WITH 110056-640 STAGES 8-14 OVERALL STATISTICS

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FLAGSTONE CA3 SOUTH
STAGES 8 - 14
OVERALL PLAN OF SUBDIVISION CATCHMENT

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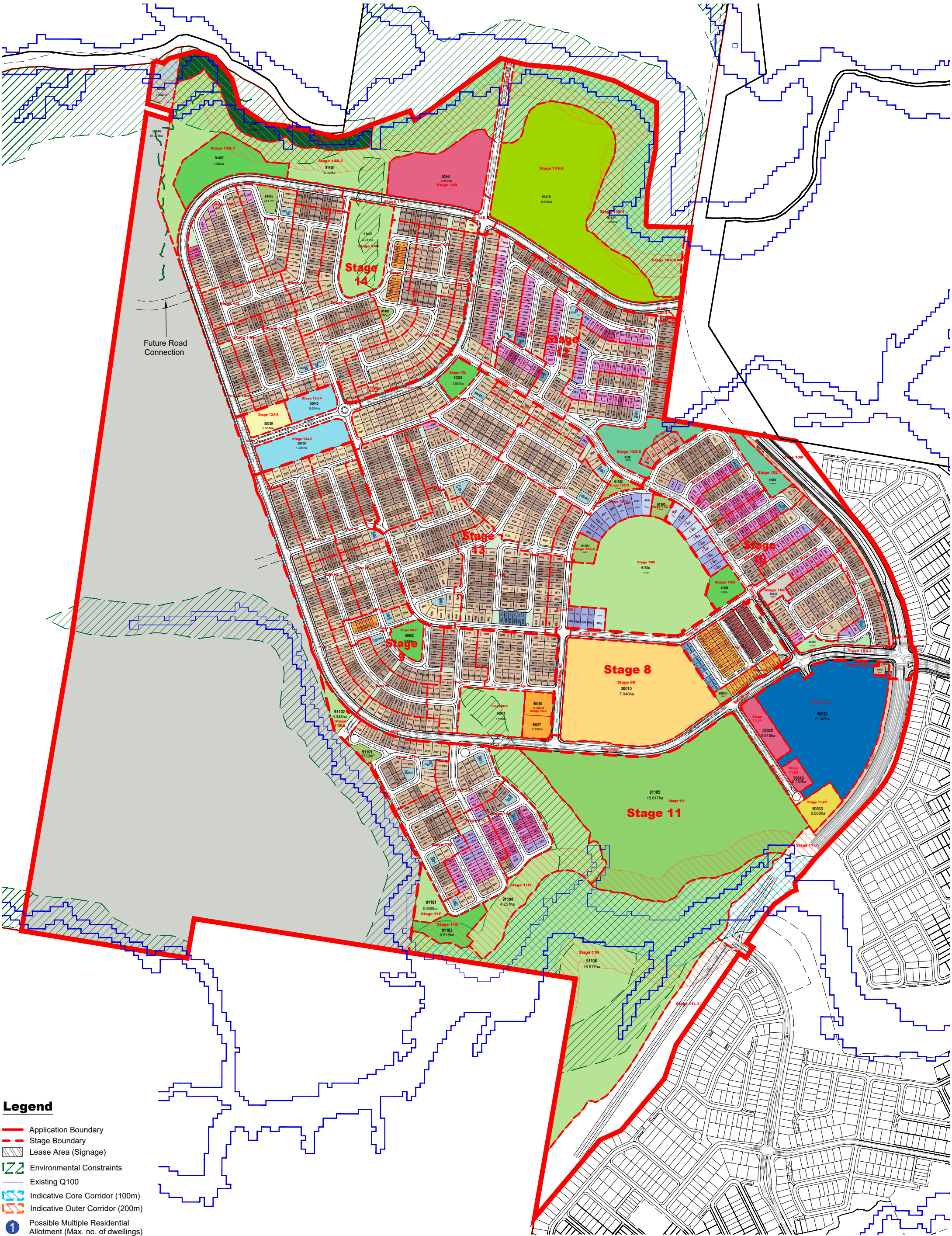
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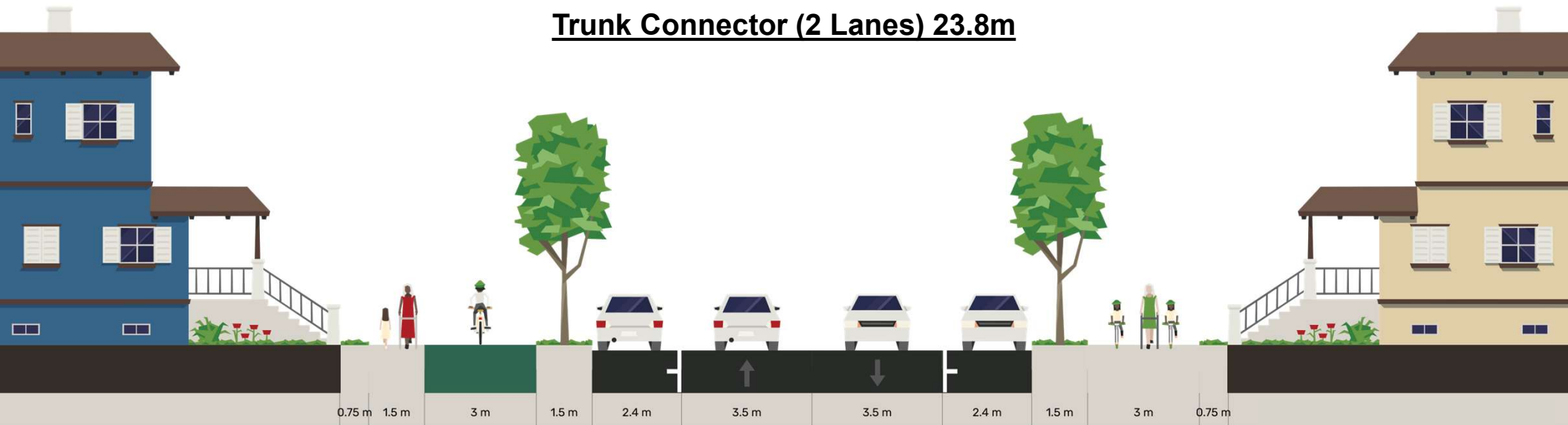
- Legend**
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TO BE READ IN CONJUNCTION WITH 110056-640 STAGES 8-14 OVERALL STATISTICS

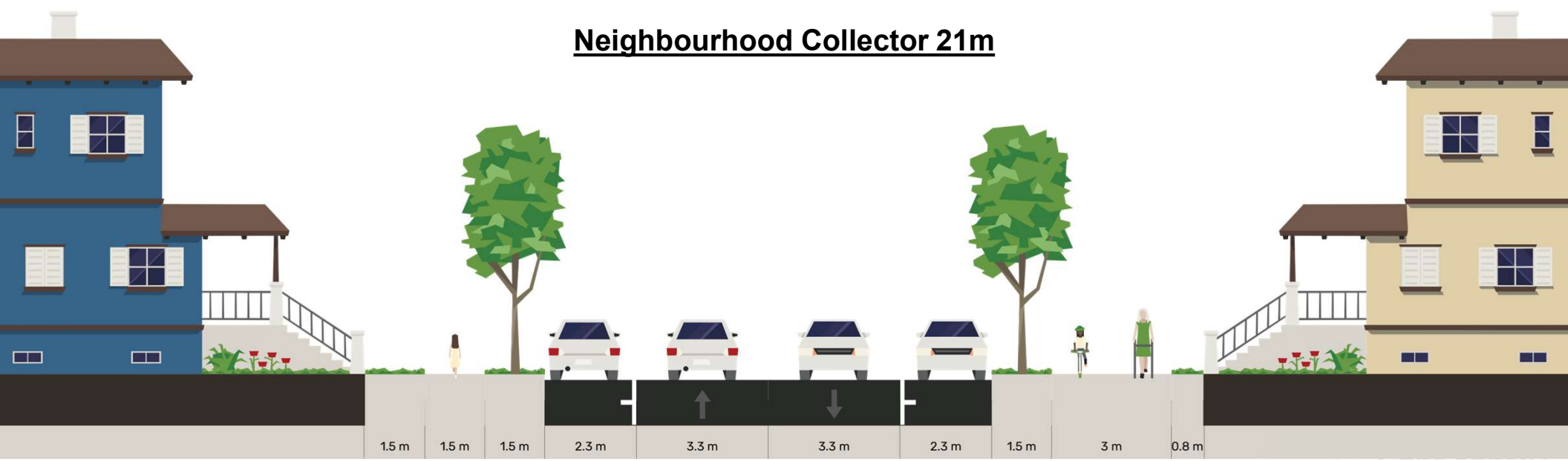
Appendix B: Typical Road Cross-Sections



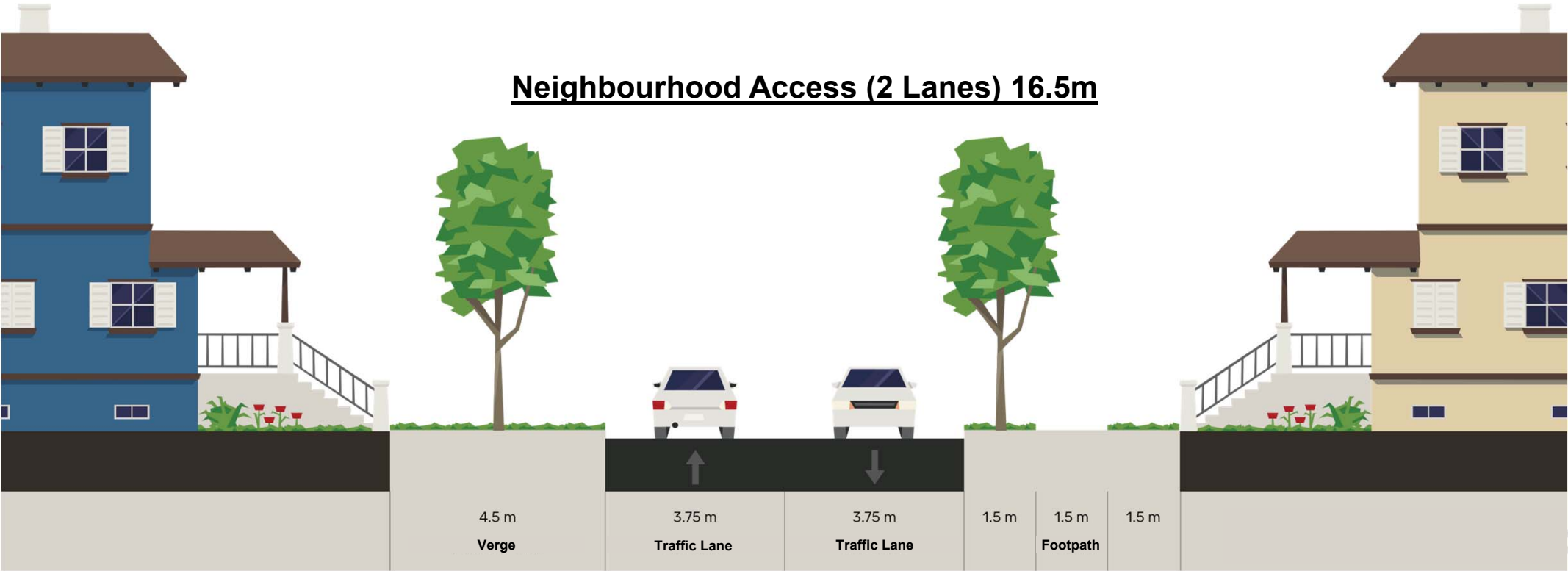
Trunk Connector (2 Lanes) 23.8m



Neighbourhood Collector 21m



Neighbourhood Access (2 Lanes) 16.5m



Esplanade Road

Open Space



Neighbourhood Lane 6.5m



Appendix C: Key Intersection SIDRA Summaries

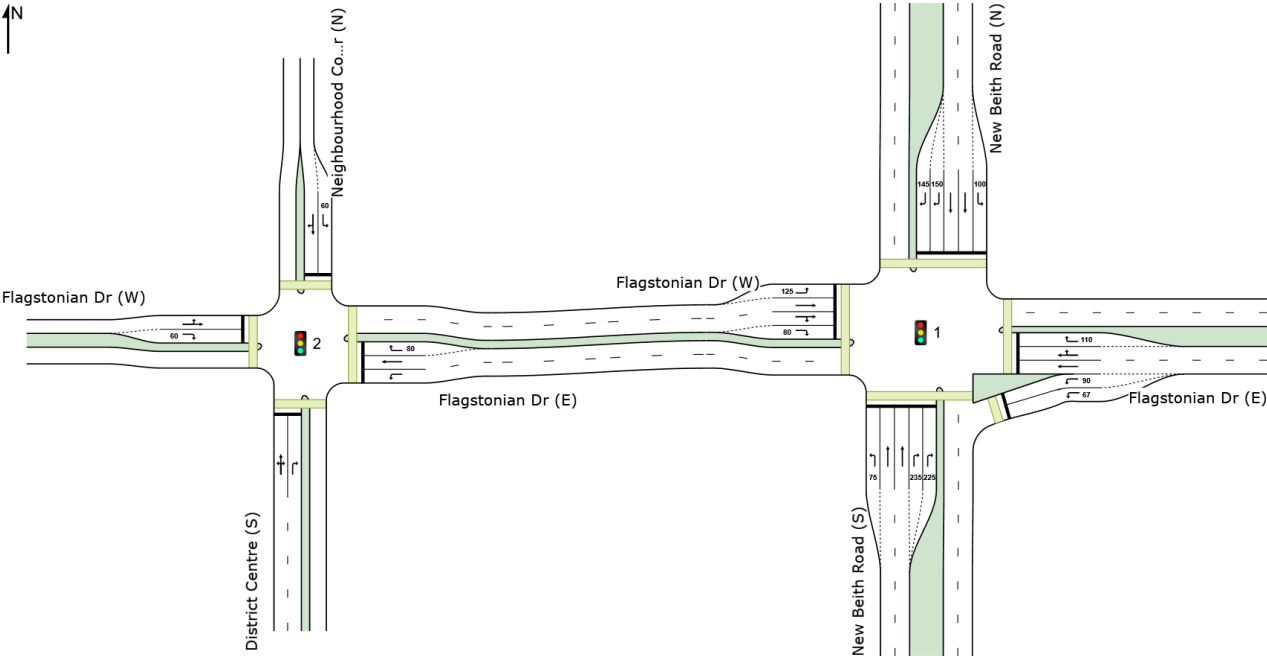


NETWORK LAYOUT

Network: N101 [2066 District Centre AM_LCC_ThruRight
(Network Folder: District Centre Network)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	CCG ID	Site Name
1	NA	1_2066 AM
2	NA	2_2066 AM

MOVEMENT SUMMARY

 Site: 1 [1_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

 Network: N101 [2066 District Centre AM_LCC_ThruRight (Network Folder: District Centre Network)]

New Beith Road / Flagstonian Drive

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Network Practical Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	Aver. Back Of Queue	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist]			km/h
			veh/h	%	veh/h	%	v/c	sec			m			
South: New Beith Road (S)														
1	L2	All MCs	146	2.1	146	2.1	0.193	36.2	LOS C	2.9	20.9	0.67	0.74	39.3
2	T1	All MCs	1272	2.4	1272	2.4	0.814	34.9	LOS C	22.5	160.6	0.86	0.79	51.8
3	R2	All MCs	677	2.1	677	2.1	*0.835	68.8	LOS E	14.6	103.8	1.00	0.93	29.0
Approach			2095	2.2	2095	2.2	0.835	46.0	LOS D	22.5	160.6	0.89	0.83	41.5
East: Flagstonian Dr (E)														
4	L2	All MCs	254	3.5	254	3.5	0.158	31.3	LOS C	3.1	22.5	0.63	0.74	41.6
5	T1	All MCs	214	1.4	214	1.4	0.478	56.1	LOS D	6.2	44.3	0.95	0.78	13.3
6	R2	All MCs	266	1.9	266	1.9	0.478	62.8	LOS E	6.0	42.8	0.95	0.80	32.8
Approach			734	2.3	734	2.3	0.478	49.9	LOS D	6.2	44.3	0.84	0.77	31.2
North: New Beith Road (N)														
7	L2	All MCs	388	1.8	388	1.8	*0.823	54.1	LOS D	10.6	75.4	1.00	0.96	35.7
8	T1	All MCs	826	4.4	826	4.4	*0.858	62.2	LOS E	18.3	133.1	1.00	0.98	40.3
9	R2	All MCs	164	4.3	164	4.3	0.796	83.6	LOS F	3.7	27.0	1.00	0.89	23.2
Approach			1378	3.6	1378	3.6	0.858	62.5	LOS E	18.3	133.1	1.00	0.96	36.6
West: Flagstonian Dr (W)														
10	L2	All MCs	325	1.2	325	1.2	0.650	46.1	LOS D	11.2	79.0	0.88	0.83	33.8
11	T1	All MCs	319	2.5	319	2.5	*0.501	56.5	LOS E	6.9	49.1	0.92	0.77	19.3
12	R2	All MCs	168	1.2	168	1.2	0.501	73.4	LOS F	6.9	49.1	1.00	0.85	25.5
Approach			812	1.7	812	1.7	0.650	55.8	LOS D	11.2	79.0	0.92	0.81	27.1
All Vehicles			5019	2.6	5019	2.6	0.858	52.7	LOS D	22.5	160.6	0.92	0.85	36.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist]			sec	m	m/sec
						m					
South: New Beith Road (S)											
P1	Full	50	63.3	LOS F	0.2	0.2	0.95	0.95	78.7	20.0	0.25

East: Flagstonian Dr (E)											
P2 Full	50	63.3	LOS F	0.2	0.2	0.95	0.95	78.7	20.0	0.25	
P2B Slip/ Bypass	50	64.3	LOS F	0.2	0.2	0.96	0.96	79.6	20.0	0.25	
North: New Beith Road (N)											
P3 Full	50	64.3	LOS F	0.2	0.2	0.96	0.96	79.6	20.0	0.25	
West: Flagstonian Dr (W)											
P4 Full	50	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92	
All Pedestrians	250	63.9	LOS F	0.2	0.2	0.96	0.96	107.0	56.0	0.52	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: P:\P6887 Flagstone City Traffic and Transport Services\Technical\Models\SIDRA\P2300.003M 2066 CA3 South Masterplan SIDRA Models.sip9

MOVEMENT SUMMARY

 Site: 2 [2_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

 Network: N101 [2066 District Centre AM_LCC_ThruRight (Network Folder: District Centre Network)]

District Centre Access

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 140 seconds (Network Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	Aver. Back Of Queue	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed	
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				
South: District Centre (S)															
1	L2	All MCs	1	0.0	1	0.0	0.342	73.6	LOS F	2.6	19.0	0.97	0.75	0.97	11.3
2	T1	All MCs	15	0.0	15	0.0	0.342	63.9	LOS E	2.6	19.0	0.97	0.75	0.97	19.7
3	R2	All MCs	115	6.4	115	6.4	0.342	67.3	LOS E	2.6	19.1	0.97	0.76	0.97	5.6
Approach			131	5.6	131	5.6	0.342	67.0	LOS E	2.6	19.1	0.97	0.76	0.97	7.8
East: Flagstonian Dr (E)															
4	L2	All MCs	236	2.7	236	2.7	* 0.477	40.2	LOS C	6.8	48.9	1.00	0.83	1.00	17.2
5	T1	All MCs	285	2.2	285	2.2	0.533	54.0	LOS D	11.0	78.3	0.98	0.84	0.98	17.0
6	R2	All MCs	32	3.3	32	3.3	* 0.487	84.3	LOS F	1.4	10.2	1.00	0.74	1.00	18.8
Approach			553	2.5	553	2.5	0.533	49.9	LOS D	11.0	78.3	0.99	0.83	0.99	17.2
North: Neighbourhood Connector (N)															
7	L2	All MCs	184	0.0	184	0.0	0.496	58.5	LOS E	6.9	48.3	0.94	0.81	0.94	19.4
8	T1	All MCs	40	0.0	40	0.0	* 0.180	59.6	LOS E	1.8	12.4	0.92	0.72	0.92	21.0
9	R2	All MCs	7	0.0	7	0.0	0.180	62.8	LOS E	1.8	12.4	0.92	0.72	0.92	22.3
Approach			232	0.0	232	0.0	0.496	58.8	LOS E	6.9	48.3	0.94	0.79	0.94	19.8
West: Flagstonian Dr (W)															
10	L2	All MCs	7	0.0	7	0.0	0.538	33.0	LOS C	14.7	104.0	0.68	0.61	0.68	35.5
11	T1	All MCs	565	1.3	565	1.3	* 0.538	27.5	LOS B	14.7	104.0	0.68	0.61	0.68	20.6
12	R2	All MCs	35	0.0	35	0.0	0.056	46.1	LOS D	1.0	6.8	0.71	0.70	0.71	16.8
Approach			607	1.2	607	1.2	0.538	28.6	LOS C	14.7	104.0	0.68	0.62	0.68	16.8
All Vehicles			1522	1.9	1522	1.9	0.538	44.2	LOS D	14.7	104.0	0.86	0.73	0.86	16.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: District Centre (S)											
P1	Full	50	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92

East: Flagstonian Dr (E)											
P2	Full	50	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
North: Neighbourhood Connector (N)											
P3	Full	50	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
West: Flagstonian Dr (W)											
P4	Full	50	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
All Pedestrians		200	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 Site: 1 [1_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

 Network: N101 [2066 District Centre PM_LCC_ThruRight (Network Folder: District Centre Network)]

New Beith Road / Flagstonian Drive

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Practical Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	Aver. Back Of Queue	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist]			km/h
			veh/h	%	veh/h	%	v/c	sec			m			
South: New Beith Road (S)														
1	L2	All MCs	142	0.7	142	0.7	0.137	28.1	LOS B	3.0	20.8	0.51	0.71	40.0
2	T1	All MCs	759	3.6	759	3.6	0.590	45.8	LOS D	14.4	103.6	0.88	0.77	46.0
3	R2	All MCs	157	1.9	157	1.9	0.536	80.8	LOS F	3.5	25.0	1.00	0.78	26.4
Approach			1058	2.9	1058	2.9	0.590	48.6	LOS D	14.4	103.6	0.85	0.76	41.2
East: Flagstonian Dr (E)														
4	L2	All MCs	786	1.3	786	1.3	*0.843	44.7	LOS D	12.4	87.4	1.00	0.90	36.0
5	T1	All MCs	346	0.9	346	0.9	0.776	66.9	LOS E	11.6	81.9	1.00	0.90	11.6
6	R2	All MCs	409	1.7	409	1.7	0.776	73.8	LOS F	11.1	78.4	1.00	0.89	30.1
Approach			1541	1.3	1541	1.3	0.843	57.4	LOS E	12.4	87.4	1.00	0.90	29.6
North: New Beith Road (N)														
7	L2	All MCs	209	1.0	209	1.0	0.246	42.0	LOS C	5.6	39.5	0.65	0.76	42.9
8	T1	All MCs	1291	1.4	1291	1.4	*0.855	41.0	LOS C	26.2	185.5	0.90	0.84	49.1
9	R2	All MCs	307	0.3	307	0.3	0.577	72.4	LOS F	6.7	46.8	0.98	0.81	25.5
Approach			1807	1.2	1807	1.2	0.855	46.5	LOS D	26.2	185.5	0.88	0.83	42.2
West: Flagstonian Dr (W)														
10	L2	All MCs	140	2.1	140	2.1	0.273	31.4	LOS C	3.1	22.4	0.88	0.78	38.8
11	T1	All MCs	268	1.5	268	1.5	*0.430	70.0	LOS E	6.4	45.3	1.00	0.84	16.6
12	R2	All MCs	155	2.6	155	2.6	0.430	76.9	LOS F	6.4	45.3	1.00	0.84	24.9
Approach			563	2.0	563	2.0	0.430	62.3	LOS E	6.4	45.3	0.97	0.83	24.5
All Vehicles			4969	1.7	4969	1.7	0.855	52.1	LOS D	26.2	185.5	0.92	0.83	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	sec		[Ped ped	Dist]			sec	m	m/sec
						m					
South: New Beith Road (S)											
P1	Full	50	68.3	LOS F	0.2	0.2	0.96	0.96	83.7	20.0	0.24

East: Flagstonian Dr (E)											
P2 Full	50	68.3	LOS F	0.2	0.2	0.96	0.96	83.7	20.0	0.24	
P2B Slip/ Bypass	50	32.6	LOS D	0.1	0.1	0.92	0.92	48.0	20.0	0.42	
North: New Beith Road (N)											
P3 Full	50	69.3	LOS F	0.2	0.2	0.96	0.96	84.6	20.0	0.24	
West: Flagstonian Dr (W)											
P4 Full	50	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90	
All Pedestrians	250	61.6	LOS F	0.2	0.2	0.95	0.95	104.6	56.0	0.54	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 Site: 2 [2_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

 Network: N101 [2066 District Centre PM_LCC_ThruRight (Network Folder: District Centre Network)]

District Centre Access

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 150 seconds (Network Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	Aver. Back Of Queue	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed	
			[Total HV]		[Total HV]					[Veh. veh	Dist]				
			veh/h	%	veh/h	%	v/c	sec			m			km/h	
South: District Centre (S)															
1	L2	All MCs	9	0.0	9	0.0	* 0.545	74.1	LOS F	6.1	42.9	0.98	0.80	0.98	11.1
2	T1	All MCs	28	3.7	28	3.7	0.545	64.5	LOS E	6.1	42.9	0.98	0.80	0.98	19.5
3	R2	All MCs	254	0.4	254	0.4	0.545	68.0	LOS E	6.2	43.9	0.98	0.80	0.98	5.5
Approach			292	0.7	292	0.7	0.545	67.8	LOS E	6.2	43.9	0.98	0.80	0.98	7.6
East: Flagstonian Dr (E)															
4	L2	All MCs	123	3.4	123	3.4	0.108	13.4	LOS A	1.6	11.3	0.53	0.67	0.53	30.3
5	T1	All MCs	582	0.2	582	0.2	* 0.535	24.3	LOS B	15.6	109.5	0.66	0.60	0.66	30.9
6	R2	All MCs	123	0.0	123	0.0	0.207	36.9	LOS C	2.9	20.4	0.56	0.71	0.56	30.6
Approach			828	0.6	828	0.6	0.535	24.6	LOS B	15.6	109.5	0.63	0.63	0.63	28.5
North: Neighbourhood Connector (N)															
7	L2	All MCs	92	8.0	92	8.0	0.107	26.5	LOS B	2.2	16.2	0.57	0.69	0.57	29.2
8	T1	All MCs	17	0.0	17	0.0	* 0.091	63.9	LOS E	0.9	6.2	0.92	0.69	0.92	20.1
9	R2	All MCs	5	0.0	5	0.0	0.091	67.1	LOS E	0.9	6.2	0.92	0.69	0.92	21.5
Approach			114	6.5	114	6.5	0.107	33.9	LOS C	2.2	16.2	0.64	0.69	0.64	26.6
West: Flagstonian Dr (W)															
10	L2	All MCs	7	0.0	7	0.0	0.531	61.6	LOS E	9.8	69.3	0.92	0.78	0.92	24.1
11	T1	All MCs	245	1.3	245	1.3	0.531	56.0	LOS D	9.8	69.3	0.92	0.78	0.92	10.0
12	R2	All MCs	5	0.0	5	0.0	* 0.213	98.3	LOS F	0.3	1.9	1.00	0.64	1.00	8.7
Approach			258	1.2	258	1.2	0.531	57.0	LOS E	9.8	69.3	0.92	0.78	0.92	10.0
All Vehicles			1492	1.2	1492	1.2	0.545	39.4	LOS C	15.6	109.5	0.75	0.69	0.75	19.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance										
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Aver. Speed
		ped/h	sec		[Ped ped]	Dist]			sec	m/sec
						m				
South: District Centre (S)										
P1	Full	50	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0

East: Flagstonian Dr (E)											
P2	Full	50	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Neighbourhood Connector (N)											
P3	Full	50	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Flagstonian Dr (W)											
P4	Full	50	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		200	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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SITE LAYOUT

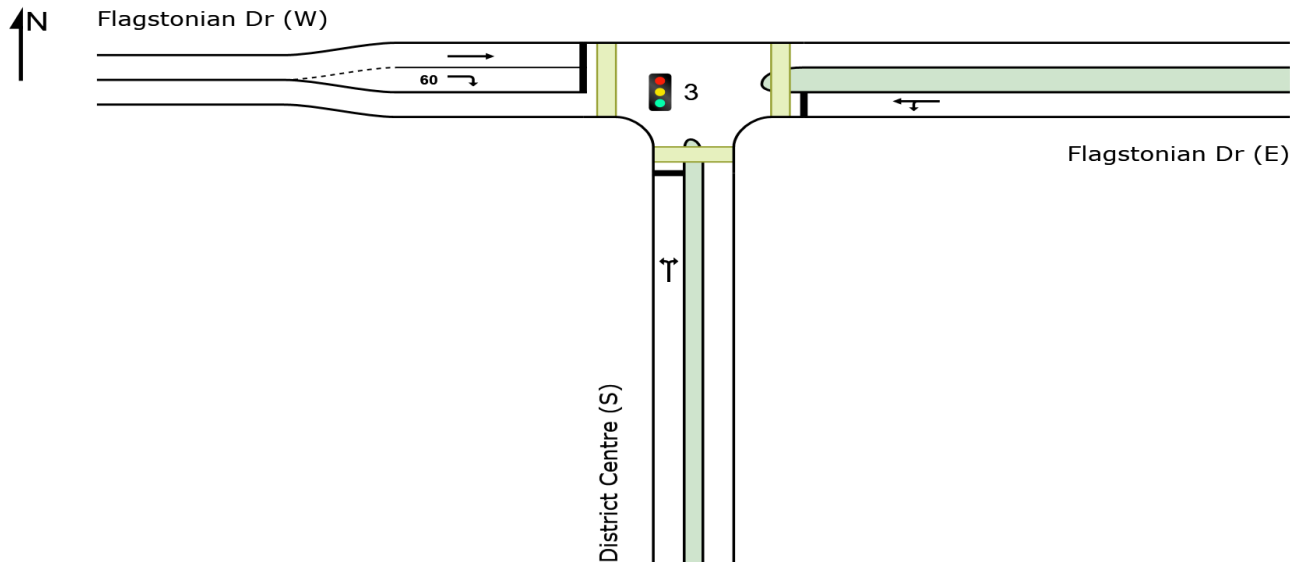
 **Site: 3 [3_2066 AM (Site Folder: 2066 AM)]**

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

 Site: 3 [3_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 45 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: District Centre (S)															
1	L2	All MCs	19	0.0	19	0.0	0.330	21.3	LOS C	1.4	10.4	0.94	0.74	0.94	30.2
3	R2	All MCs	45	9.3	45	9.3	* 0.330	25.8	LOS C	1.4	10.4	0.94	0.74	0.94	20.7
Approach			64	6.6	64	6.6	0.330	24.5	LOS C	1.4	10.4	0.94	0.74	0.94	24.0
East: Flagstonian Dr (E)															
4	L2	All MCs	72	4.4	72	4.4	0.650	23.9	LOS C	6.3	44.9	0.94	0.83	1.01	25.1
5	T1	All MCs	225	1.4	225	1.4	0.650	17.0	LOS B	6.3	44.9	0.94	0.83	1.01	38.9
Approach			297	2.1	297	2.1	0.650	18.7	LOS B	6.3	44.9	0.94	0.83	1.01	36.3
West: Flagstonian Dr (W)															
11	T1	All MCs	573	0.6	573	0.6	* 0.698	12.6	LOS B	11.0	77.7	0.88	0.80	0.93	43.9
12	R2	All MCs	13	8.3	13	8.3	* 0.054	25.0	LOS C	0.3	1.9	0.90	0.67	0.90	30.7
Approach			585	0.7	585	0.7	0.698	12.9	LOS B	11.0	77.7	0.88	0.80	0.93	43.5
All Vehicles			946	1.6	946	1.6	0.698	15.5	LOS B	11.0	77.7	0.90	0.80	0.96	39.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: District Centre (S)												
P1	Full	50	50	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17
East: Flagstonian Dr (E)												
P2	Full	50	50	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17
West: Flagstonian Dr (W)												
P4	Full	50	50	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17
All Pedestrians		150	150	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 Site: 3 [3_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: District Centre (S)															
1	L2	All MCs	34	0.0	34	0.0	0.452	26.3	LOS C	2.7	19.1	0.96	0.77	0.96	27.1
3	R2	All MCs	59	1.8	59	1.8	* 0.452	34.2	LOS C	2.7	19.1	0.96	0.77	0.96	18.3
Approach			93	1.1	93	1.1	0.452	31.3	LOS C	2.7	19.1	0.96	0.77	0.96	22.0
East: Flagstonian Dr (E)															
4	L2	All MCs	45	0.0	45	0.0	0.759	22.5	LOS C	16.1	113.0	0.91	0.86	0.98	25.4
5	T1	All MCs	552	0.2	552	0.2	* 0.759	17.9	LOS B	16.1	113.0	0.91	0.86	0.98	39.2
Approach			597	0.2	597	0.2	0.759	18.2	LOS B	16.1	113.0	0.91	0.86	0.98	38.4
West: Flagstonian Dr (W)															
11	T1	All MCs	200	1.1	200	1.1	0.221	10.3	LOS B	3.5	24.7	0.63	0.52	0.63	46.2
12	R2	All MCs	13	0.0	13	0.0	* 0.051	30.9	LOS C	0.3	2.3	0.90	0.68	0.90	28.0
Approach			213	1.0	213	1.0	0.221	11.5	LOS B	3.5	24.7	0.65	0.53	0.65	44.6
All Vehicles			902	0.5	902	0.5	0.759	18.0	LOS B	16.1	113.0	0.85	0.77	0.90	37.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped]	[Dist] m			sec	m	m/sec
South: District Centre (S)												
P1	Full	50	50	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
East: Flagstonian Dr (E)												
P2	Full	50	50	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: Flagstonian Dr (W)												
P4	Full	50	50	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	150	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: P:\P6887 Flagstone City Traffic and Transport Services\Technical\Models\SIDRA\P2300.003M 2066 CA3 South Masterplan SIDRA Models.sip9

SITE LAYOUT

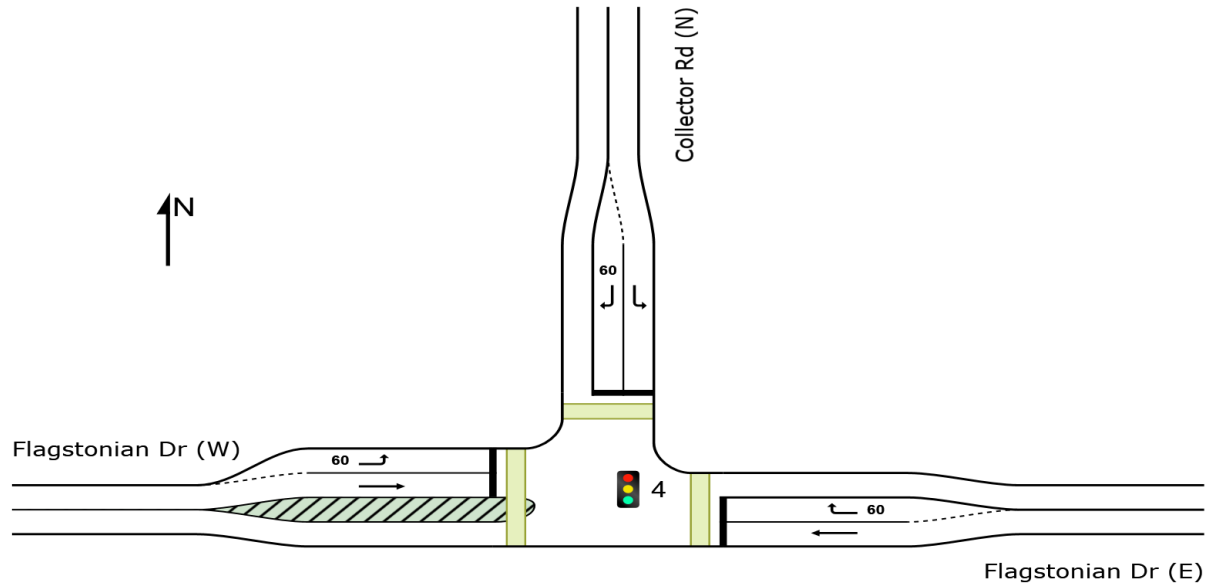
 Site: 4 [4_2066 AM (Site Folder: 2066 AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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MOVEMENT SUMMARY

 Site: 4 [4_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 45 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist]				
			veh/h	%	veh/h	%	v/c	sec			m				km/h
East: Flagstonian Dr (E)															
5	T1	All MCs	132	0.0	132	0.0	0.179	10.3	LOS B	2.0	13.8	0.70	0.56	0.70	50.5
6	R2	All MCs	23	9.1	23	9.1	* 0.075	23.1	LOS C	0.4	3.4	0.86	0.70	0.86	38.2
Approach			155	1.4	155	1.4	0.179	12.2	LOS B	2.0	13.8	0.73	0.58	0.73	48.2
North: Collector Rd (N)															
7	L2	All MCs	96	0.0	96	0.0	0.179	17.9	LOS B	1.6	11.4	0.78	0.73	0.78	40.3
9	R2	All MCs	40	0.0	40	0.0	* 0.138	23.3	LOS C	0.8	5.6	0.89	0.71	0.89	39.3
Approach			136	0.0	136	0.0	0.179	19.5	LOS B	1.6	11.4	0.82	0.72	0.82	40.0
West: Flagstonian Dr (W)															
10	L2	All MCs	39	0.0	39	0.0	0.039	10.9	LOS B	0.4	2.9	0.50	0.66	0.50	45.9
11	T1	All MCs	494	0.9	494	0.9	* 0.674	13.6	LOS B	9.6	67.9	0.89	0.80	0.93	48.1
Approach			533	0.8	533	0.8	0.674	13.4	LOS B	9.6	67.9	0.86	0.79	0.90	47.9
All Vehicles			823	0.8	823	0.8	0.674	14.2	LOS B	9.6	67.9	0.83	0.74	0.85	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped]	[Dist] m			sec	m	m/sec
East: Flagstonian Dr (E)												
P2	Full	50	50	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17
North: Collector Rd (N)												
P3	Full	50	50	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17
West: Flagstonian Dr (W)												
P4	Full	50	50	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17
All Pedestrians		150	150	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 Site: 4 [4_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				km/h
East: Flagstonian Dr (E)															
5	T1	All MCs	495	0.2	495	0.2	* 0.847	20.6	LOS C	11.5	80.8	1.00	1.05	1.38	43.6
6	R2	All MCs	63	0.0	63	0.0	* 0.151	19.6	LOS B	1.0	7.3	0.84	0.73	0.84	39.9
Approach			558	0.2	558	0.2	0.847	20.5	LOS C	11.5	80.8	0.98	1.02	1.32	43.1
North: Collector Rd (N)															
7	L2	All MCs	44	0.0	44	0.0	0.079	15.7	LOS B	0.6	4.5	0.75	0.69	0.75	41.5
9	R2	All MCs	29	7.1	29	7.1	* 0.111	21.6	LOS C	0.5	4.0	0.89	0.70	0.89	39.9
Approach			74	2.9	74	2.9	0.111	18.1	LOS B	0.6	4.5	0.81	0.69	0.81	40.8
West: Flagstonian Dr (W)															
10	L2	All MCs	23	0.0	23	0.0	0.028	12.2	LOS B	0.3	1.8	0.58	0.66	0.58	45.2
11	T1	All MCs	127	1.7	127	1.7	0.220	11.8	LOS B	1.9	13.8	0.79	0.62	0.79	49.4
Approach			151	1.4	151	1.4	0.220	11.8	LOS B	1.9	13.8	0.75	0.63	0.75	48.6
All Vehicles			782	0.7	782	0.7	0.847	18.6	LOS B	11.5	80.8	0.92	0.91	1.16	43.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Flagstonian Dr (E)												
P2	Full	50	50	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19
North: Collector Rd (N)												
P3	Full	50	50	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19
West: Flagstonian Dr (W)												
P4	Full	50	50	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19
All Pedestrians		150	150	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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SITE LAYOUT

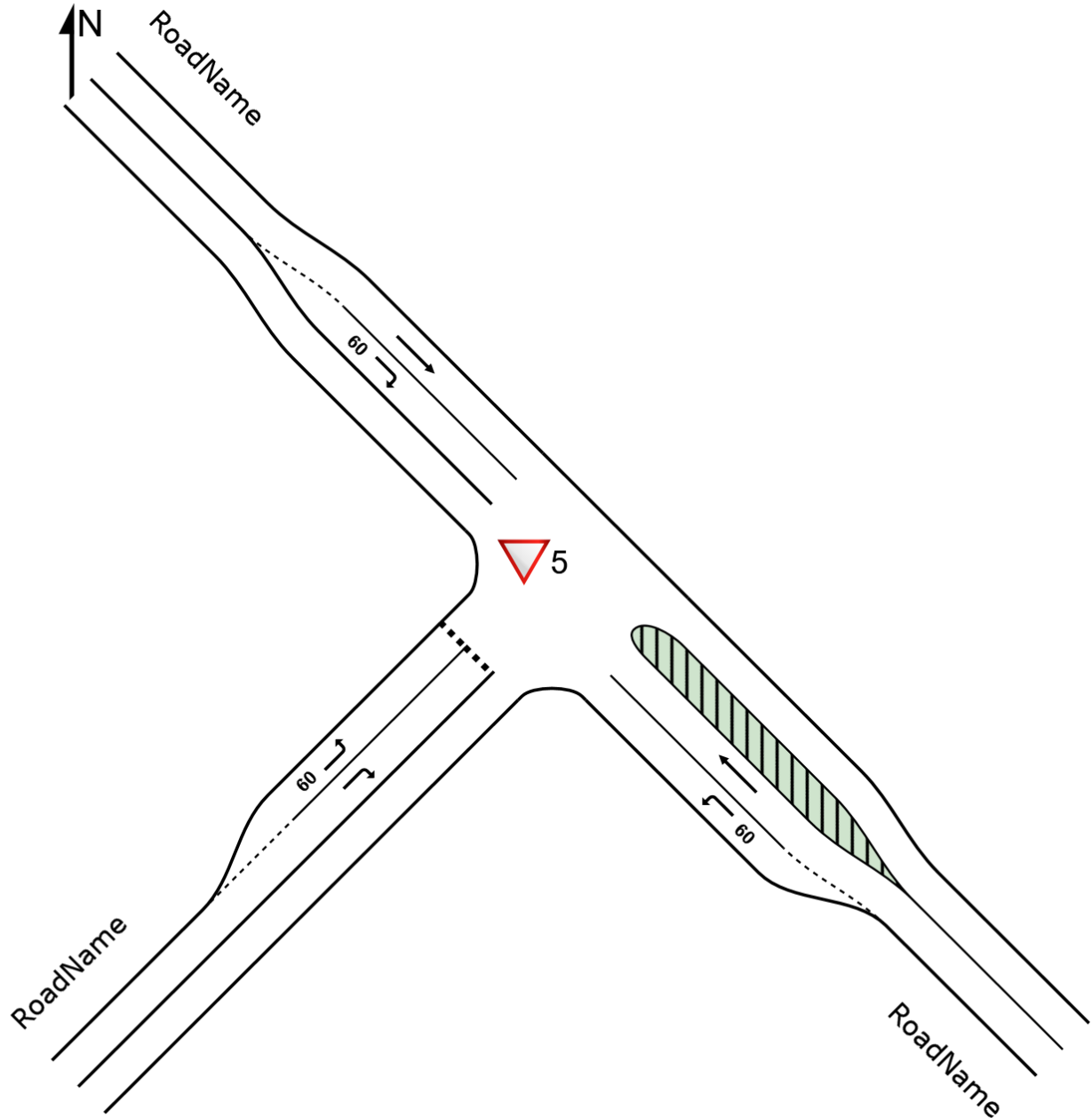
▽ Site: 5 [5_2066 AM (Site Folder: 2066 AM)]

CA3 Collector / Ulladulla N Connection

Site Category: (None)

Give-Way (Two-Way)

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MOVEMENT SUMMARY

▼ Site: 5 [5_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

CA3 Collector / Ulladulla N Connection

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				
			veh/h		veh/h		v/c	sec							km/h
SouthEast: RoadName															
4	L2	All MCs	124	0.0	124	0.0	0.067	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
5	T1	All MCs	38	0.0	38	0.0	0.019	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			162	0.0	162	0.0	0.067	4.3	NA	0.0	0.0	0.00	0.44	0.00	54.4
NorthWest: RoadName															
11	T1	All MCs	36	0.0	36	0.0	0.018	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	All MCs	52	0.0	52	0.0	0.042	6.1	LOS A	0.2	1.2	0.27	0.56	0.27	52.0
Approach			88	0.0	88	0.0	0.042	3.6	NA	0.2	1.2	0.16	0.33	0.16	55.0
SouthWest: RoadName															
1	L2	All MCs	148	4.1	148	4.1	0.117	5.7	LOS A	0.5	3.3	0.12	0.55	0.12	52.4
3	R2	All MCs	431	0.7	431	0.7	0.498	8.4	LOS A	3.8	26.9	0.49	0.66	0.58	50.9
Approach			579	1.6	579	1.6	0.498	7.7	LOS A	3.8	26.9	0.40	0.63	0.46	51.2
All Vehicles			829	1.1	829	1.1	0.498	6.6	NA	3.8	26.9	0.29	0.56	0.34	52.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

▼ Site: 5 [5_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

CA3 Collector / Ulladulla N Connection

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				
			veh/h	%	veh/h	%	v/c	sec							km/h
SouthEast: RoadName															
4	L2	All MCs	397	0.8	397	0.8	0.215	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.8
5	T1	All MCs	79	0.0	79	0.0	0.040	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Approach			476	0.6	476	0.6	0.215	4.7	NA	0.0	0.0	0.00	0.48	0.00	53.9
NorthWest: RoadName															
11	T1	All MCs	43	0.0	43	0.0	0.022	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	All MCs	95	1.1	95	1.1	0.111	8.0	LOS A	0.4	3.0	0.50	0.71	0.50	51.0
Approach			138	0.7	138	0.7	0.111	5.5	NA	0.4	3.0	0.34	0.49	0.34	53.5
SouthWest: RoadName															
1	L2	All MCs	68	0.0	68	0.0	0.055	5.8	LOS A	0.2	1.4	0.17	0.55	0.17	52.4
3	R2	All MCs	95	2.1	95	2.1	0.151	9.2	LOS A	0.6	4.2	0.52	0.73	0.52	50.2
Approach			163	1.2	163	1.2	0.151	7.8	LOS A	0.6	4.2	0.37	0.65	0.37	51.1
All Vehicles			777	0.8	777	0.8	0.215	5.5	NA	0.6	4.2	0.14	0.52	0.14	53.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: P:\P6887 Flagstone City Traffic and Transport Services\Technical\Models\SIDRA\P2300.003M 2066 CA3 South Masterplan SIDRA Models.sip9

SITE LAYOUT

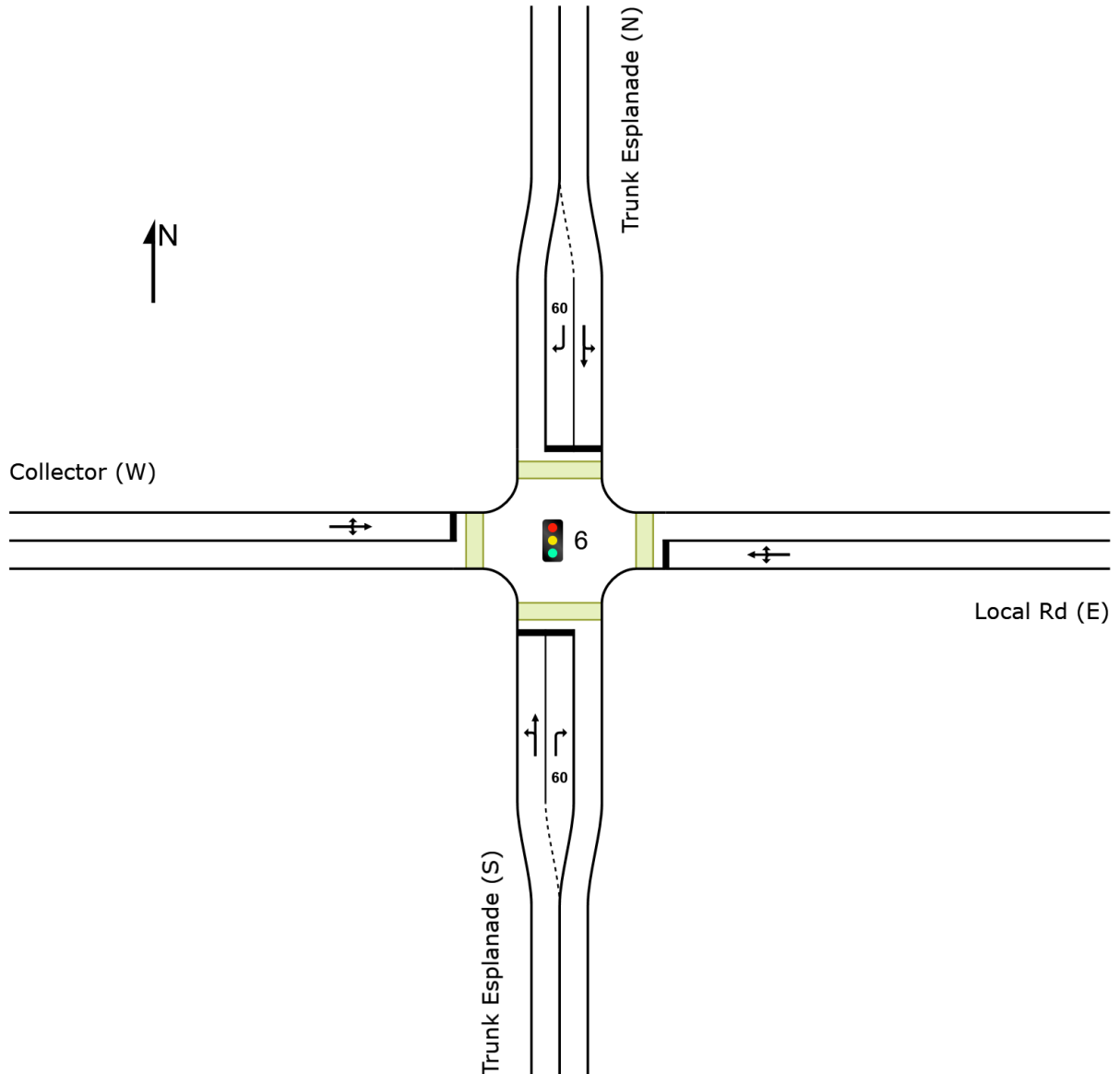
 Site: 6 [6_2066 AM (Site Folder: 2066 AM)]

NA

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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MOVEMENT SUMMARY

 Site: 6 [6_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist]				km/h
			veh/h	%	veh/h	%	v/c	sec			m				
South: Trunk Esplanade (S)															
1	L2	All MCs	22	0.0	22	0.0	* 0.259	27.4	LOS C	2.6	18.7	0.71	0.60	0.71	46.6
2	T1	All MCs	172	3.1	172	3.1	0.259	7.3	LOS A	2.6	18.7	0.71	0.60	0.71	51.8
3	R2	All MCs	1	0.0	1	0.0	0.023	29.5	LOS C	0.0	0.2	0.99	0.57	0.99	37.0
Approach			195	2.7	195	2.7	0.259	9.7	LOS A	2.6	18.7	0.71	0.60	0.71	51.1
East: Local Rd (E)															
4	L2	All MCs	1	0.0	1	0.0	* 0.024	24.8	LOS C	0.1	0.4	0.95	0.61	0.95	39.3
5	T1	All MCs	1	0.0	1	0.0	0.024	20.2	LOS C	0.1	0.4	0.95	0.61	0.95	37.9
6	R2	All MCs	1	0.0	1	0.0	0.024	24.8	LOS C	0.1	0.4	0.95	0.61	0.95	39.2
Approach			3	0.0	3	0.0	0.024	23.2	LOS C	0.1	0.4	0.95	0.61	0.95	38.8
North: Trunk Esplanade (N)															
7	L2	All MCs	3	0.0	3	0.0	0.089	14.2	LOS B	0.9	6.2	0.52	0.42	0.52	49.3
8	T1	All MCs	86	0.0	86	0.0	0.089	5.0	LOS A	0.9	6.2	0.52	0.42	0.52	55.1
9	R2	All MCs	3	0.0	3	0.0	* 0.068	30.1	LOS C	0.1	0.5	0.99	0.61	0.99	36.8
Approach			93	0.0	93	0.0	0.089	6.2	LOS A	0.9	6.2	0.54	0.43	0.54	54.0
West: Collector (W)															
10	L2	All MCs	6	0.0	6	0.0	* 0.099	24.9	LOS C	0.4	2.6	0.91	0.67	0.91	40.1
11	T1	All MCs	6	0.0	6	0.0	0.099	17.2	LOS B	0.4	2.6	0.91	0.67	0.91	38.7
12	R2	All MCs	7	0.0	7	0.0	0.099	21.7	LOS C	0.4	2.6	0.91	0.67	0.91	40.1
Approach			20	0.0	20	0.0	0.099	21.3	LOS C	0.4	2.6	0.91	0.67	0.91	39.6
All Vehicles			311	1.7	311	1.7	0.259	9.5	LOS A	2.6	18.7	0.67	0.55	0.67	50.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped]	[Dist]			sec	m	m/sec
South: Trunk Esplanade (S)												
P1	Full	20	20	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19
East: Local Rd (E)												
P2	Full	20	20	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19

North: Trunk Esplanade (N)												
P3	Full	20	20	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19
West: Collector (W)												
P4	Full	50	50	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19
All	Pedestrians	110	110	14.5	LOS B	0.0	0.0	0.85	0.85	168.3	200.0	1.19

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 Site: 6 [6_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 45 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist]				km/h
			veh/h	%	veh/h	%	v/c	sec			m				
South: Trunk Esplanade (S)															
1	L2	All MCs	53	0.0	53	0.0	* 0.408	34.9	LOS C	2.9	20.2	0.93	0.75	0.93	40.7
2	T1	All MCs	86	0.0	86	0.0	0.408	12.4	LOS B	2.9	20.2	0.93	0.75	0.93	44.6
3	R2	All MCs	16	0.0	16	0.0	* 0.191	31.2	LOS C	0.4	2.7	0.99	0.68	0.99	36.4
Approach			155	0.0	155	0.0	0.408	22.0	LOS C	2.9	20.2	0.94	0.74	0.94	42.3
East: Local Rd (E)															
4	L2	All MCs	8	0.0	8	0.0	* 0.176	28.3	LOS C	0.8	5.3	0.94	0.69	0.94	39.5
5	T1	All MCs	23	0.0	23	0.0	0.176	20.5	LOS C	0.8	5.3	0.94	0.69	0.94	38.1
6	R2	All MCs	3	0.0	3	0.0	0.176	25.0	LOS C	0.8	5.3	0.94	0.69	0.94	39.4
Approach			35	0.0	35	0.0	0.176	22.8	LOS C	0.8	5.3	0.94	0.69	0.94	38.6
North: Trunk Esplanade (N)															
7	L2	All MCs	17	0.0	17	0.0	0.195	19.4	LOS B	2.2	15.3	0.69	0.57	0.69	46.2
8	T1	All MCs	132	0.8	132	0.8	0.195	9.1	LOS A	2.2	15.3	0.69	0.57	0.69	51.3
9	R2	All MCs	9	0.0	9	0.0	0.115	30.9	LOS C	0.2	1.6	0.98	0.66	0.98	36.5
Approach			158	0.7	158	0.7	0.195	11.5	LOS B	2.2	15.3	0.70	0.58	0.70	49.5
West: Collector (W)															
10	L2	All MCs	5	0.0	5	0.0	* 0.121	28.1	LOS C	0.5	3.6	0.93	0.69	0.93	38.8
11	T1	All MCs	5	0.0	5	0.0	0.121	20.3	LOS C	0.5	3.6	0.93	0.69	0.93	37.4
12	R2	All MCs	13	8.3	13	8.3	0.121	25.0	LOS C	0.5	3.6	0.93	0.69	0.93	38.5
Approach			23	4.5	23	4.5	0.121	24.6	LOS C	0.5	3.6	0.93	0.69	0.93	38.3
All Vehicles			371	0.6	371	0.6	0.408	17.8	LOS B	2.9	20.2	0.84	0.67	0.84	44.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped]	[Dist] m			sec	m	m/sec
South: Trunk Esplanade (S)												
P1	Full	20	20	16.9	LOS B	0.0	0.0	0.87	0.87	170.8	200.0	1.17
East: Local Rd (E)												
P2	Full	20	20	16.9	LOS B	0.0	0.0	0.87	0.87	170.8	200.0	1.17

North: Trunk Esplanade (N)												
P3	Full	20	20	16.9	LOS B	0.0	0.0	0.87	0.87	170.8	200.0	1.17
West: Collector (W)												
P4	Full	50	50	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17
All	Pedestrians	110	110	16.9	LOS B	0.1	0.1	0.87	0.87	170.8	200.0	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT

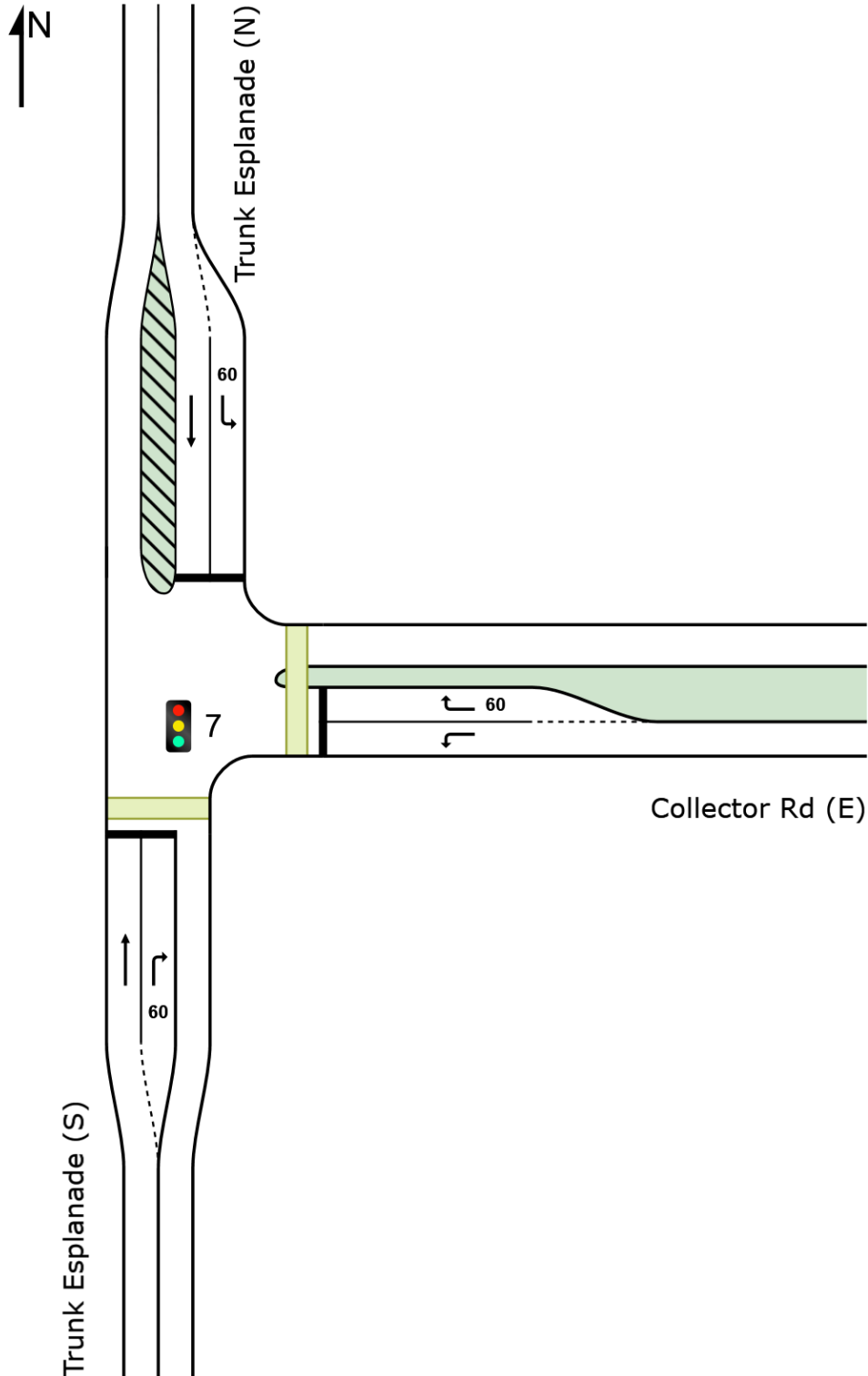
 Site: 7 [7_2066 AM (Site Folder: 2066 AM)]

NA

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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Project: P:\P6887 Flagstone City Traffic and Transport Services\Technical\Models\SIDRA\P2300.003M 2066 CA3 South Masterplan SIDRA Models.sip9

MOVEMENT SUMMARY

 Site: 7 [7_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 20 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Trunk Esplanade (S)															
2	T1	All MCs	86	3.7	86	3.7	0.065	1.0	LOS A	0.3	2.0	0.33	0.22	0.33	58.5
3	R2	All MCs	93	1.1	93	1.1	* 0.126	9.9	LOS A	0.6	4.3	0.66	0.71	0.66	46.5
Approach			179	2.4	179	2.4	0.126	5.6	LOS A	0.6	4.3	0.50	0.47	0.50	51.6
East: Collector Rd (E)															
4	L2	All MCs	58	0.0	58	0.0	0.104	10.4	LOS B	0.4	3.1	0.75	0.69	0.75	45.6
6	R2	All MCs	18	11.8	18	11.8	* 0.070	13.5	LOS B	0.2	1.3	0.88	0.67	0.88	43.7
Approach			76	2.8	76	2.8	0.104	11.2	LOS B	0.4	3.1	0.78	0.69	0.78	45.1
North: Trunk Esplanade (N)															
7	L2	All MCs	31	0.0	31	0.0	0.110	14.5	LOS B	0.3	2.0	0.89	0.70	0.89	43.9
8	T1	All MCs	35	0.0	35	0.0	* 0.089	7.7	LOS A	0.3	2.1	0.84	0.60	0.84	53.3
Approach			65	0.0	65	0.0	0.110	10.9	LOS B	0.3	2.1	0.87	0.65	0.87	48.4
All Vehicles			320	2.0	320	2.0	0.126	8.0	LOS A	0.6	4.3	0.64	0.56	0.64	49.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m					
South: Trunk Esplanade (S)												
P1	Full	50	50	4.9	LOS A	0.0	0.0	0.70	0.70	158.8	200.0	1.26
East: Collector Rd (E)												
P2	Full	50	50	4.9	LOS A	0.0	0.0	0.70	0.70	158.8	200.0	1.26
All Pedestrians		100	100	4.9	LOS A	0.0	0.0	0.70	0.70	158.8	200.0	1.26

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

 Site: 7 [7_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 15 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				
			veh/h	%	veh/h	%	v/c	sec							km/h
South: Trunk Esplanade (S)															
2	T1	All MCs	61	1.7	61	1.7	0.059	1.9	LOS A	0.2	1.6	0.50	0.38	0.50	57.7
3	R2	All MCs	42	0.0	42	0.0	* 0.068	9.5	LOS A	0.2	1.6	0.71	0.69	0.71	46.7
Approach			103	1.0	103	1.0	0.068	5.0	LOS A	0.2	1.6	0.59	0.50	0.59	52.7
East: Collector Rd (E)															
4	L2	All MCs	141	0.0	141	0.0	0.228	8.9	LOS A	0.8	5.8	0.75	0.72	0.75	46.5
6	R2	All MCs	44	4.8	44	4.8	0.074	8.6	LOS A	0.2	1.8	0.71	0.67	0.71	46.6
Approach			185	1.1	185	1.1	0.228	8.8	LOS A	0.8	5.8	0.74	0.71	0.74	46.5
North: Trunk Esplanade (N)															
7	L2	All MCs	9	11.1	9	11.1	0.041	12.7	LOS B	0.1	0.5	0.89	0.65	0.89	44.8
8	T1	All MCs	17	6.3	17	6.3	0.067	7.1	LOS A	0.1	0.9	0.90	0.61	0.90	53.8
Approach			26	8.0	26	8.0	0.067	9.1	LOS A	0.1	0.9	0.90	0.62	0.90	50.1
All Vehicles			315	1.7	315	1.7	0.228	7.6	LOS A	0.8	5.8	0.70	0.64	0.70	48.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m					
South: Trunk Esplanade (S)												
P1	Full	50	50	2.7	LOS A	0.0	0.0	0.60	0.60	156.6	200.0	1.28
East: Collector Rd (E)												
P2	Full	50	50	2.7	LOS A	0.0	0.0	0.60	0.60	156.6	200.0	1.28
All Pedestrians		100	100	2.7	LOS A	0.0	0.0	0.60	0.60	156.6	200.0	1.28

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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SITE LAYOUT

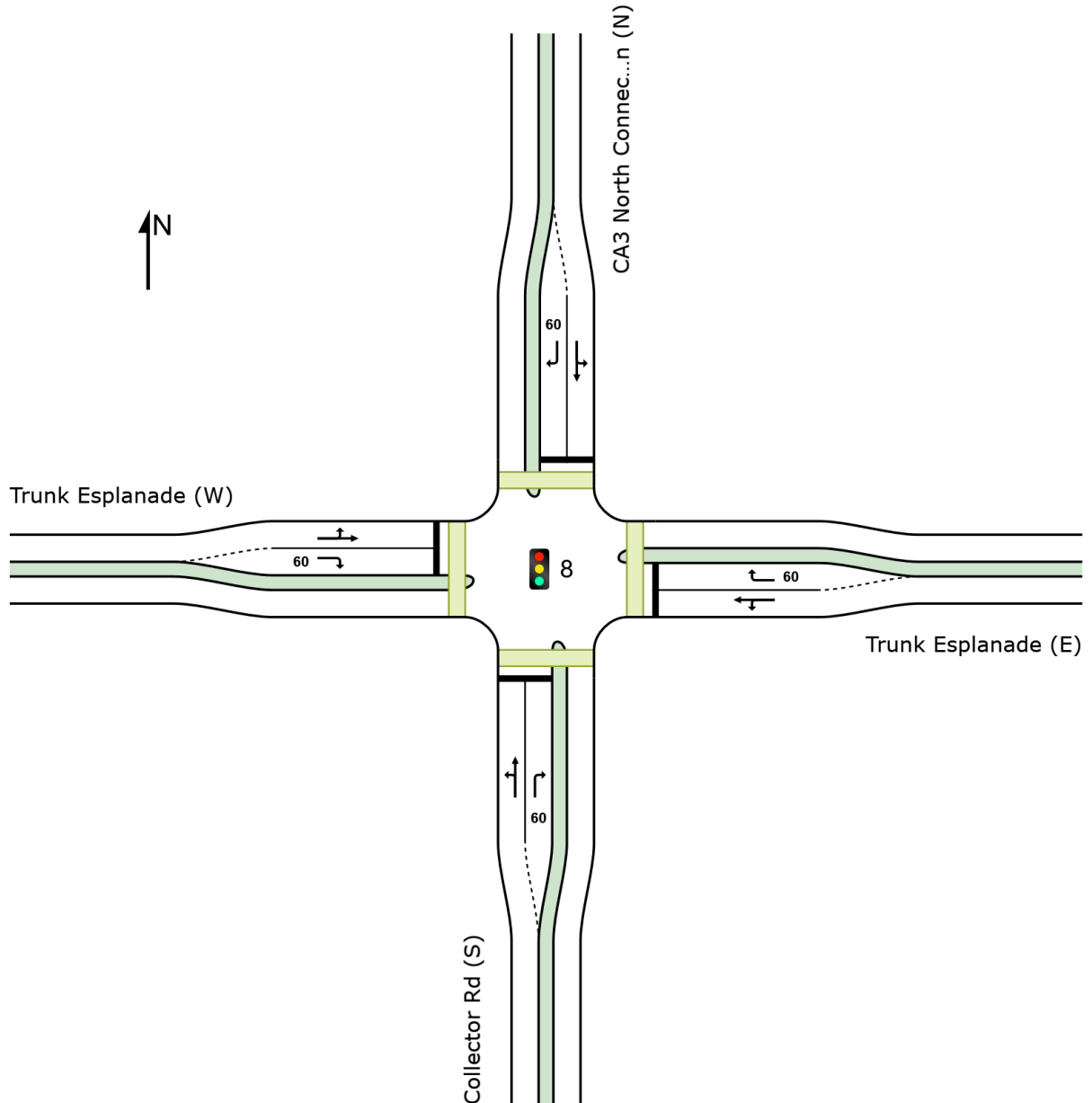
 Site: 8 [8_2066 AM (Site Folder: 2066 AM)]

NA

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Collector Rd (S)												
P1	Full	20	20	28.4	LOS C	0.0	0.0	0.90	0.90	182.2	200.0	1.10
East: Trunk Esplanade (E)												

P2 Full	20	20	28.4	LOS C	0.0	0.0	0.90	0.90	182.2	200.0	1.10
North: CA3 North Connection (N)											
P3 Full	20	20	28.4	LOS C	0.0	0.0	0.90	0.90	182.2	200.0	1.10
West: Trunk Esplanade (W)											
P4 Full	20	20	28.4	LOS C	0.0	0.0	0.90	0.90	182.2	200.0	1.10
All Pedestrians	80	80	28.4	LOS C	0.0	0.0	0.90	0.90	182.2	200.0	1.10

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 8 [8 2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

NA

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist]				
			veh/h	%	veh/h	%	v/c	sec			m				km/h
South: Collector Road (S)															
1	L2	All MCs	1	0.0	1	0.0	0.032	35.0	LOS C	0.2	1.6	0.88	0.60	0.88	41.4
2	T1	All MCs	8	0.0	8	0.0	0.032	23.5	LOS C	0.2	1.6	0.88	0.60	0.88	42.7
3	R2	All MCs	65	3.1	65	3.1	* 0.358	34.9	LOS C	1.9	13.8	0.97	0.75	0.97	37.1
Approach			74	2.7	74	2.7	0.358	33.7	LOS C	1.9	13.8	0.96	0.73	0.96	37.7
East: Trunk Esplanade (E)															
4	L2	All MCs	237	0.4	237	0.4	* 0.673	27.5	LOS C	10.7	75.9	0.92	0.84	0.95	42.3
5	T1	All MCs	169	3.0	169	3.0	0.673	16.2	LOS B	10.7	75.9	0.92	0.84	0.95	43.7
6	R2	All MCs	34	2.9	34	2.9	* 0.374	39.2	LOS D	1.1	7.8	1.00	0.71	1.00	35.5
Approach			440	1.6	440	1.6	0.673	24.0	LOS C	10.7	75.9	0.92	0.83	0.95	42.2
North: CA3 North Connection (N)															
7	L2	All MCs	22	4.5	22	4.5	0.238	37.5	LOS D	1.2	8.5	0.96	0.72	0.96	38.2
8	T1	All MCs	19	0.0	19	0.0	* 0.238	25.5	LOS C	1.2	8.5	0.96	0.72	0.96	39.4
9	R2	All MCs	56	1.8	56	1.8	0.305	34.7	LOS C	1.6	11.7	0.96	0.74	0.96	37.2
Approach			97	2.1	97	2.1	0.305	33.5	LOS C	1.6	11.7	0.96	0.73	0.96	37.8
West: Trunk Esplanade (W)															
10	L2	All MCs	23	8.7	23	8.7	0.241	40.7	LOS D	2.6	18.8	0.85	0.69	0.85	42.5
11	T1	All MCs	83	2.4	83	2.4	0.241	16.8	LOS B	2.6	18.8	0.85	0.69	0.85	44.1
12	R2	All MCs	1	0.0	1	0.0	0.011	36.7	LOS D	0.0	0.2	0.97	0.58	0.97	36.5
Approach			107	3.7	107	3.7	0.241	22.1	LOS C	2.6	18.8	0.85	0.69	0.85	43.7
All Vehicles			718	2.1	718	2.1	0.673	26.0	LOS C	10.7	75.9	0.92	0.78	0.94	41.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

- * Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
South: Collector Road (S)												
P1	Full	20	20	23.4	LOS C	0.0	0.0	0.88	0.88	177.3	200.0	1.13
East: Trunk Esplanade (E)												

P2 Full	20	20	23.4	LOS C	0.0	0.0	0.88	0.88	177.3	200.0	1.13
North: CA3 North Connection (N)											
P3 Full	20	20	23.4	LOS C	0.0	0.0	0.88	0.88	177.3	200.0	1.13
West: Trunk Esplanade (W)											
P4 Full	20	20	23.4	LOS C	0.0	0.0	0.88	0.88	177.3	200.0	1.13
All Pedestrians	80	80	23.4	LOS C	0.0	0.0	0.88	0.88	177.3	200.0	1.13

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT

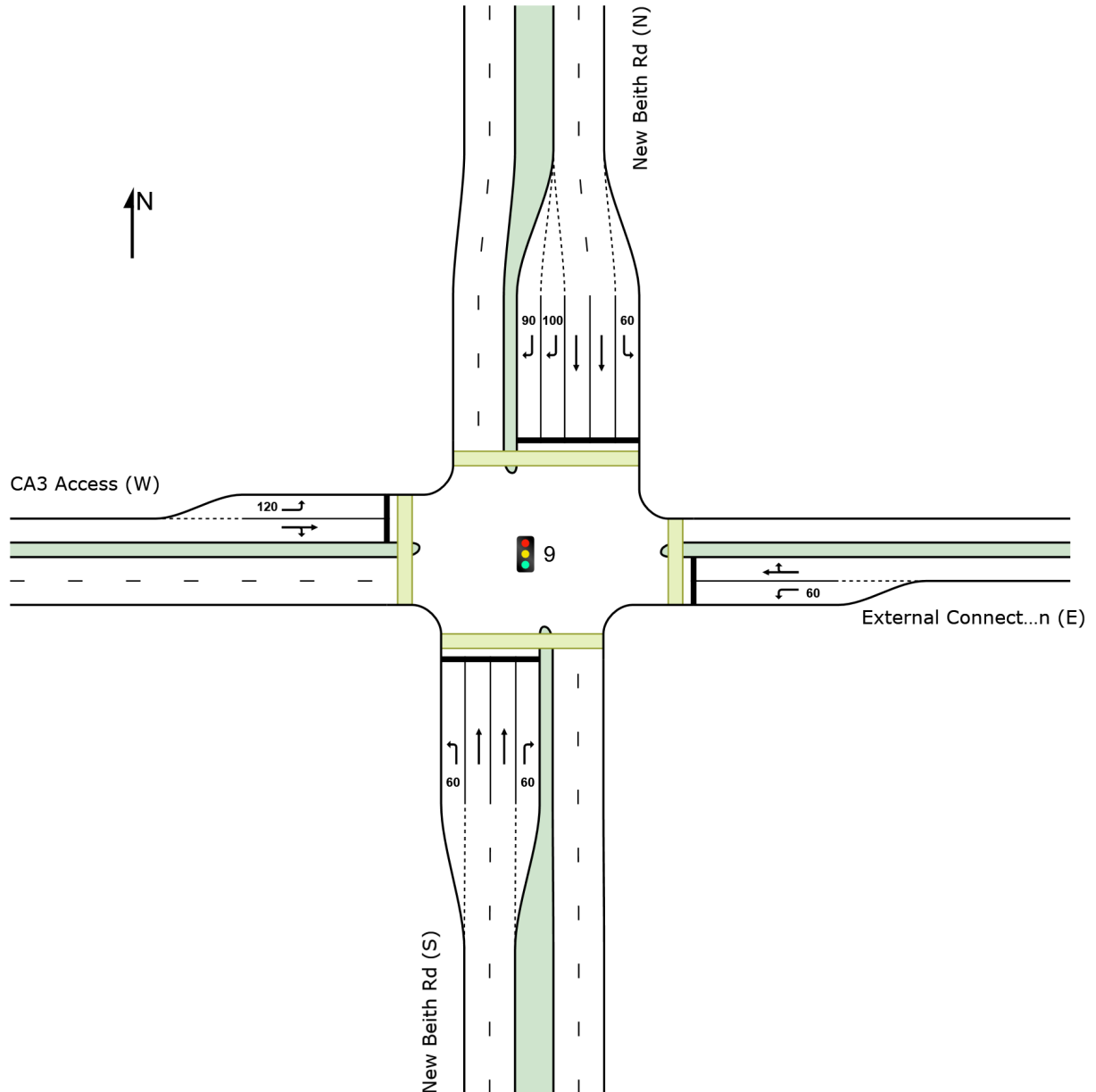
 **Site: 9 [9_2066 AM (Site Folder: 2066 AM)]**

New Beith Road / CA3 Central Access

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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Project: P:\P6887 Flagstone City Traffic and Transport Services\Technical\Models\SIDRA\P2300.003M 2066 CA3 South Masterplan SIDRA Models.sip9

MOVEMENT SUMMARY

 Site: 9 [9_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Beith Road / CA3 Central Access

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist] m				km/h
South: New Beith Rd (S)															
1	L2	All MCs	77	2.6	77	2.6	0.076	34.0	LOS C	2.0	14.5	0.49	0.71	0.49	53.7
2	T1	All MCs	1771	2.0	1771	2.0	* 0.850	41.0	LOS D	45.8	326.3	0.91	0.87	0.95	60.4
3	R2	All MCs	31	3.2	31	3.2	0.073	60.3	LOS E	1.4	10.1	0.81	0.72	0.81	42.0
Approach			1879	2.1	1879	2.1	0.850	41.0	LOS D	45.8	326.3	0.89	0.86	0.92	52.8
East: External Connection (E)															
4	L2	All MCs	64	1.6	64	1.6	0.119	38.9	LOS D	2.7	19.4	0.77	0.73	0.77	43.8
5	T1	All MCs	6	0.0	6	0.0	* 0.434	61.2	LOS E	3.2	22.5	1.00	0.75	1.00	28.9
6	R2	All MCs	48	0.0	48	0.0	0.434	66.9	LOS E	3.2	22.5	1.00	0.75	1.00	36.9
Approach			118	0.8	118	0.8	0.434	51.4	LOS D	3.2	22.5	0.87	0.74	0.87	39.8
North: New Beith Rd (N)															
7	L2	All MCs	20	10.0	20	10.0	0.029	37.8	LOS D	0.4	3.2	0.63	0.69	0.63	55.1
8	T1	All MCs	1209	4.1	1209	4.1	0.842	54.1	LOS D	34.6	250.8	0.98	0.93	1.06	53.3
9	R2	All MCs	142	7.0	142	7.0	* 0.803	80.2	LOS F	4.6	34.2	1.00	0.87	1.30	34.7
Approach			1371	4.5	1371	4.5	0.842	56.6	LOS E	34.6	250.8	0.98	0.92	1.07	46.4
West: CA3 Access (W)															
10	L2	All MCs	305	1.0	305	1.0	0.684	50.5	LOS D	16.4	115.6	0.97	0.84	0.97	41.1
11	T1	All MCs	8	0.0	8	0.0	* 0.496	52.5	LOS D	7.3	50.8	0.97	0.79	0.97	30.9
12	R2	All MCs	123	0.0	123	0.0	0.496	58.1	LOS E	7.3	50.8	0.97	0.79	0.97	37.7
Approach			436	0.7	436	0.7	0.684	52.7	LOS D	16.4	115.6	0.97	0.83	0.97	40.0
All Vehicles			3804	2.8	3804	2.8	0.850	48.3	LOS D	45.8	326.3	0.93	0.87	0.98	48.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped]	[Dist] m			sec	m	m/sec
South: New Beith Rd (S)												
P1	Full	5	5	53.2	LOS E	0.0	0.0	0.94	0.94	207.1	200.0	0.97
East: External Connection (E)												
P2	Full	30	30	53.3	LOS E	0.1	0.1	0.94	0.94	207.1	200.0	0.97

North: New Beith Rd (N)												
P3	Full	20	20	53.2	LOS E	0.1	0.1	0.94	0.94	207.1	200.0	0.97
West: CA3 Access (W)												
P4	Full	50	50	53.3	LOS E	0.2	0.2	0.94	0.94	207.2	200.0	0.97
All	Pedestrians	105	105	53.3	LOS E	0.2	0.2	0.94	0.94	207.1	200.0	0.97

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

 Site: 9 [9_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

New Beith Road / CA3 Central Access

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist] m				km/h
South: New Beith Rd (S)															
1	L2	All MCs	134	0.7	134	0.7	0.199	46.4	LOS D	4.9	34.5	0.72	0.77	0.72	47.2
2	T1	All MCs	1118	3.0	1118	3.0	0.857	56.6	LOS E	31.9	228.8	0.99	0.96	1.12	52.9
3	R2	All MCs	44	4.5	44	4.5	* 0.538	83.2	LOS F	2.5	18.4	1.00	0.76	1.04	35.4
Approach			1296	2.9	1296	2.9	0.857	56.5	LOS E	31.9	228.8	0.97	0.94	1.07	46.2
East: External Connection (E)															
4	L2	All MCs	32	3.1	32	3.1	0.176	56.1	LOS E	1.6	11.7	0.95	0.72	0.95	37.9
5	T1	All MCs	8	0.0	8	0.0	0.215	54.4	LOS D	1.5	11.1	0.97	0.71	0.97	30.8
6	R2	All MCs	20	10.0	20	10.0	0.215	60.1	LOS E	1.5	11.1	0.97	0.71	0.97	38.7
Approach			60	5.0	60	5.0	0.215	57.2	LOS E	1.6	11.7	0.96	0.72	0.96	37.3
North: New Beith Rd (N)															
7	L2	All MCs	55	0.0	55	0.0	* 0.050	24.9	LOS C	0.8	5.3	0.44	0.69	0.44	59.7
8	T1	All MCs	1842	1.1	1842	1.1	* 0.865	36.2	LOS D	45.6	321.9	0.92	0.89	0.98	60.6
9	R2	All MCs	305	2.0	305	2.0	0.339	47.8	LOS D	6.8	48.3	0.87	0.79	0.87	44.0
Approach			2202	1.2	2202	1.2	0.865	37.5	LOS D	45.6	321.9	0.90	0.87	0.95	53.6
West: CA3 Access (W)															
10	L2	All MCs	121	2.5	121	2.5	0.152	25.4	LOS C	3.9	27.6	0.64	0.73	0.64	51.0
11	T1	All MCs	1	0.0	1	0.0	* 0.192	46.4	LOS D	2.3	16.6	0.92	0.74	0.92	32.6
12	R2	All MCs	47	2.1	47	2.1	0.192	52.0	LOS D	2.3	16.6	0.92	0.74	0.92	39.4
Approach			169	2.4	169	2.4	0.192	33.0	LOS C	3.9	27.6	0.72	0.73	0.72	47.2
All Vehicles			3727	1.9	3727	1.9	0.865	44.2	LOS D	45.6	321.9	0.92	0.89	0.98	50.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped]	[Dist] m			sec	m	m/sec
South: New Beith Rd (S)												
P1	Full	5	5	48.2	LOS E	0.0	0.0	0.94	0.94	202.1	200.0	0.99
East: External Connection (E)												
P2	Full	30	30	48.3	LOS E	0.1	0.1	0.94	0.94	202.1	200.0	0.99

North: New Beith Rd (N)												
P3	Full	20	20	48.3	LOS E	0.1	0.1	0.94	0.94	202.1	200.0	0.99
West: CA3 Access (W)												
P4	Full	50	50	48.3	LOS E	0.1	0.1	0.94	0.94	202.2	200.0	0.99
All	Pedestrians	105	105	48.3	LOS E	0.1	0.1	0.94	0.94	202.1	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SITE LAYOUT

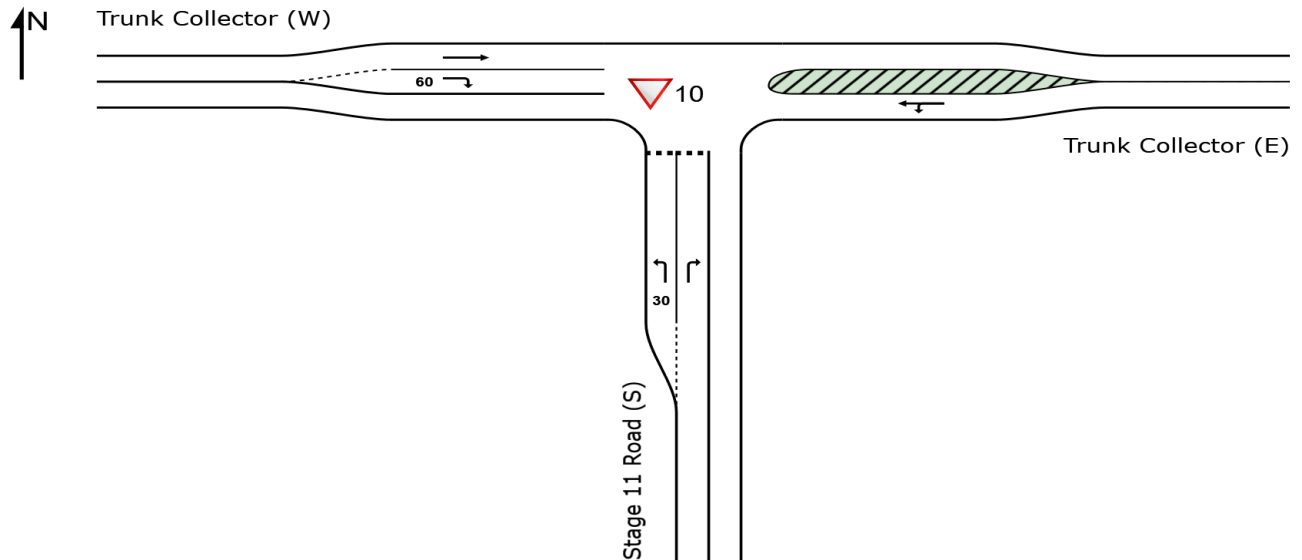
▽ Site: 10 [10_2066 AM (Site Folder: 2066 AM)]

Trunk Collector / Stage 11

Site Category: (None)

Give-Way (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

▼ Site: 10 [10_2066 AM (Site Folder: 2066 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Trunk Collector / Stage 11

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				
			veh/h		veh/h		v/c	sec							km/h
South: Stage 11 Road (S)															
1	L2	All MCs	10	0.0	10	0.0	0.007	6.0	LOS A	0.0	0.2	0.24	0.53	0.24	52.2
3	R2	All MCs	45	0.0	45	0.0	0.084	10.5	LOS B	0.3	2.1	0.58	0.80	0.58	49.3
Approach			55	0.0	55	0.0	0.084	9.7	LOS A	0.3	2.1	0.52	0.75	0.52	49.8
East: Trunk Collector (E)															
4	L2	All MCs	12	0.0	12	0.0	0.084	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	57.1
5	T1	All MCs	152	0.0	152	0.0	0.084	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach			164	0.0	164	0.0	0.084	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
West: Trunk Collector (W)															
11	T1	All MCs	460	0.9	460	0.9	0.235	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
12	R2	All MCs	8	0.0	8	0.0	0.005	6.0	LOS A	0.0	0.2	0.26	0.53	0.26	52.0
Approach			468	0.9	468	0.9	0.235	0.2	NA	0.0	0.2	0.00	0.01	0.00	59.7
All Vehicles			687	0.6	687	0.6	0.235	1.0	NA	0.3	2.1	0.04	0.08	0.04	58.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

▼ Site: 10 [10_2066 PM (Site Folder: 2066 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Trunk Collector / Stage 11

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				
			veh/h		veh/h		v/c	sec							km/h
South: Stage 11 Road (S)															
1	L2	All MCs	7	0.0	7	0.0	0.007	7.2	LOS A	0.0	0.2	0.45	0.60	0.45	51.5
3	R2	All MCs	15	0.0	15	0.0	0.028	10.2	LOS B	0.1	0.7	0.57	0.74	0.57	49.4
Approach			22	0.0	22	0.0	0.028	9.3	LOS A	0.1	0.7	0.53	0.69	0.53	50.1
East: Trunk Collector (E)															
4	L2	All MCs	31	0.0	31	0.0	0.255	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	57.1
5	T1	All MCs	468	0.6	468	0.6	0.255	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	59.5
Approach			499	0.6	499	0.6	0.255	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
West: Trunk Collector (W)															
11	T1	All MCs	129	1.6	129	1.6	0.066	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
12	R2	All MCs	9	0.0	9	0.0	0.008	7.3	LOS A	0.0	0.2	0.49	0.61	0.49	51.4
Approach			138	1.4	138	1.4	0.066	0.5	NA	0.0	0.2	0.03	0.04	0.03	59.3
All Vehicles			659	0.8	659	0.8	0.255	0.7	NA	0.1	0.7	0.02	0.06	0.02	59.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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